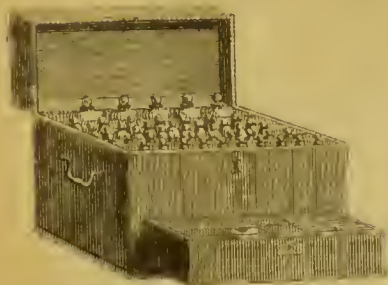


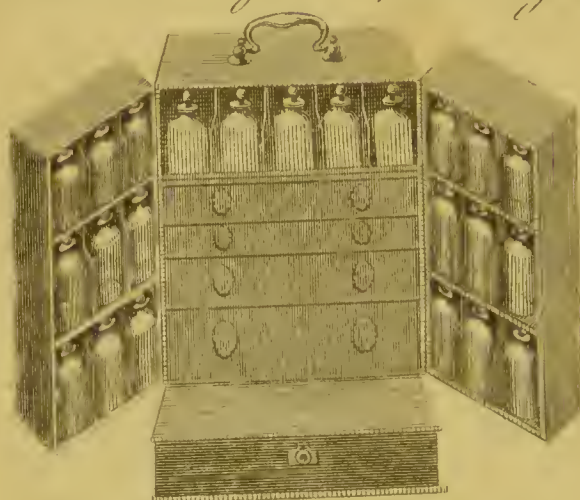
6.



*Portable Chest of Chemistry. Continental Dispensary.*



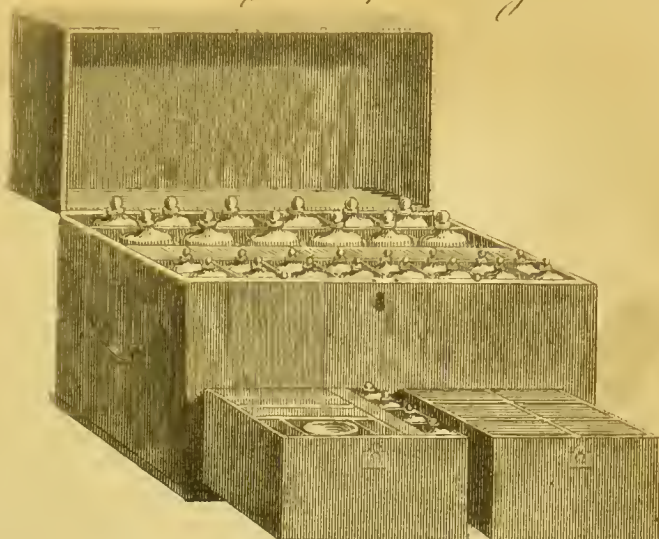
*The Family Dispensary.*



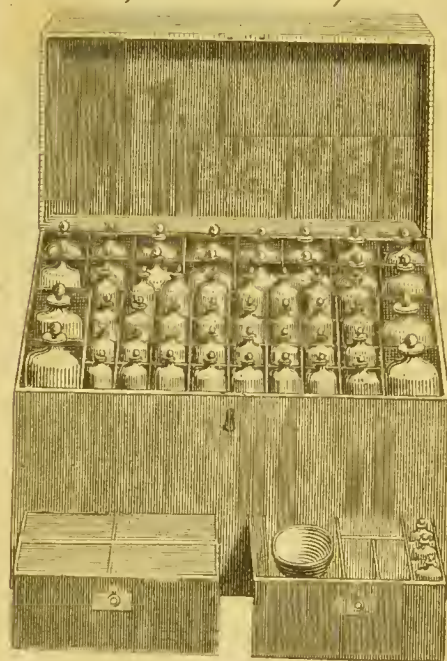
*The Clergyman's Dispensary.*



*The Veterinary Dispensary.*



*The Tropical Dispensary.*



*The Army Medicine Chest.*



*The Traveller's Case.*





THE  
**Universal Dispensatory :**

CONTAINING

**COMPANIONS**

TO

*THE TROPICAL, THE CONTINENTAL,*  
**THE FAMILY, THE COUNTRY CLERGYMAN'S,**

THE

**TRAVELLER'S, AND THE MILITARY, OR OFFICER'S**  
**DISPENSARIES, OR MEDICINE CHESTS :**

DETAILING

**The Properties, Doses, and best Methods**

OF EXHIBITING

**THE CONTENTS OF EACH CHEST,**

IN DIFFERENT

**CLIMATES AND COUNTRIES.**

BY

**REECE AND CO.**

PROPRIETORS OF THE CHEMICAL AND MEDICAL HALL, 171, PICCADILLY,  
CHEMISTS TO HER MAJESTY, &c. &c.

**London :**

**SOLD AT THE CHEMICAL AND MEDICAL HALL, 171, PICCADILLY ; AND**  
**BY SHERWOOD, NEELY, AND JONES, PATERNOSTER-ROW :**  
**AND ALL BOOKSELLERS.**

**1814.**

# THE HISTORY OF THE

ROYAL SOCIETY OF LONDON

FROM ITS ORIGIN TO THE PRESENT TIME

BY J. G. BARNARD, ESQ.

OF THE SOCIETY

LONDON



TO  
THE REV. GEORGE REECE, A. M.  
OF CRADLEY, IN THE COUNTY OF HEREFORD;  
DISTINGUISHED FOR HIS  
LIBERALITY AND BENEVOLENT DISPOSITION,  
THIS SMALL WORK,  
IS INSCRIBED,  
AS A MARK OF RESPECT,  
BY HIS AFFECTIONATE BROTHER,  
RICHARD REECE.

*Medical Hall, Piccadilly,*  
April 4, 1814.







## ADDRESS.

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**THIS** Work is published chiefly for the purpose of enclosing a copy in the different Medicine Chests furnished at the Chemical and Medical Hall; and thereby to afford an immediate reference for the use of their contents, where it may not be convenient or necessary to consult the Author's Medical Guide.

For the use of British Subjects, who may be induced to visit the East and West Indies, the Coast of Africa, and different Countries on the Continent, he has lately published a Work, under the Title of "The Medical Guide for Tropical Climates," &c. which contains full Instructions for the Prevention and Cure of the Diseases of the East and West Indies, and Coast of Africa, and those which occur on the Voyage, a System of Regulations for the Health of Europeans on their return from hot Climates, Remarks on the Climates and Diseases of the different Countries of Europe, particularly Holland, Russia, Germany, Poland, Spain, with Rules for the preservation of the Health of Travelers to these places, &c. &c.

For the use of the Country Clergy and Heads of Families and Seminaries, the Author published the Medical Guide in the Year 1802, which has gone through Ten heavy Editions.

As a Companion to the Portable Chest of Chemistry, the Author has lately published "The Chemical Guide." This Epitome of Modern Chemistry comprises the general Laws of Chemical Action, the Methods of preparing Chemical Re-

Agents, and of using them in the Analysis of Natural and Artificial Products. An Account of the Nature and Formation of elastic Fluids, with a great Variety of amusing and instructing Experiments; to which are added, means of detecting the Adulteration of Medicinal and other Substances—Directions for making Domestic Chemical Articles of real Utility; Tables of Affinity; a View of Animal Chemistry, as explaining the Laws and Functions of the Animal Machine, and the Phenomena of Disease; a Glossary, explanatory of the technical Terms employed in Chemistry, an Account of a Chest of Chemical Apparatus, for the Use of Students, &c. &c. &c.

---

## THE CHEMICAL AND MEDICAL HALL,

171, PICCADILLY, NEARLY OPPOSITE BOND STREET,

(Removed from Bedford Street, Covent Garden.)

At this Institution none but genuine Drugs and Chemical Preparations of the purest Quality are kept, and are sold on the most reasonable Terms. It has been established fourteen Years, and during that Time, no instance can be produced of a Drug or Chemical Preparation being procured at it of an inferior Quality, or of any Mistake being made in the compounding of Medicines.

To avoid the possibility of the Mistakes, which have been frequent throughout the Country, in consequence of the late Changes in the Latin Names of Drugs, every Article is titled in English.

No Article is sold without a printed Title, expressive of its Name, and of its being sold at the Chemical and Medical Hall, 171, Piccadilly.—As this is an invariable Rule, the article cannot be depended upon as coming from this Institution without such Title.

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DESCRIPTION  
OF THE DIFFERENT  
MEDICINE CHESTS,  
KEPT AT THE  
CHEMICAL & MEDICAL HALL,  
No. 171, PICCADILLY,  
OPPOSITE BOND STREET,

(LATE OF BEDFORD STREET, COVENT GARDEN.)

The Chests are neatly made of mahogany, and the bottles of the best flint glass, with air-tight stoppers. The bottles, drawers, and pots, have titles on them expressive of their contents, with a numerical Reference to the Book of Directions.

---

### THE TROPICAL DISPENSARY

For the East and West Indies, Africa, and South America. Of this Chest there are four sizes.—The largest size contains in the upper division,

*Four pint bottles for*

Magnesia	Epsom salt
Peruvian bark powder	Mindererus's spirit

*Sixteen half-pint bottles for*

Tincture of Rhubarb	Camphorated spirit
Paregoric elixir	Opodeldoc
Castor oil	Compound tinct. bark
Salt of Wormwood	Vol. tinct. guaiac gum
Concrete acid of lemon	Comp. spirit of lavender
Antimonial wine	Comp. tincture of senna
Sp. Sal. volatile	Ginger powder
Liquid Laudanum	Extract of lead

*Thirty-two four ounce bottles for*

Diluted vitriolic acid	Gum arabic powder
Tincture of myrrh	Nitre ditto
Ether	Camphor
Rhubarb powder	Aromatic tincture
Jalap ditto	Prepared natron
Basilic ditto	Essence of peppermint
Compound cretaceous ditto	Ditto cinnamon
Tincture asafoetida	Comp. tincture gentian
Bals. Copaivi	Dover's powders
Ipecacuan powder	Antimonial powder
Olive oil	Alum
Oil turpentine	Vitriolated zinc
Sp. hartshorn	Muriatic tincture of steel
Tinct. ginger and camomile	Cascarilla powder
Sweet sp. nitre	Hoffman's anodyne liquor
Salt of steel	Ipecacuan wine

*In the drawers—partitions for*

Senna leaves	Different plasters
Peruvian bark bruised	Tow, corks, syringes
Cream of Tartar	Tourniquet, probang, &c.
Flowers of sulphur	

*Twelve bottles for*

Prepared calomel	Essence for tooth-ache
Red precipitate	Lunar caustic
Emetic tartar	Red precipitate
Smelling salts	Blue vitriol
Acetic acid	Opium powder
Essential salt of bark	Essence of penny royal

*Eight pots for*

Mercurial ointment	Blistering plaster
Yellow basilicon	Spermaceti ointment
Brown cerate	Comp. colocynth pill
Citrine ointment	Squill pill

*Partitions for*

Scales and weights, graduated measures, bolus knives, spatula, slab, &c.	This chest, furnished as above, with book of directions, amounts to	-	-	-	£16	10	0
Second size ditto	-	-	-	-	-	13	15 0
Third ditto ditto	-	-	-	-	-	10	5 0
Fourth ditto ditto	-	-	-	-	-	8	15 0

# COMPANION TO THE TROPICAL DISPENSARY.

The doses specified in the following list are such as are usually administered. They should therefore be increased or diminished, according to the *strength* of the patient, and the age, by the following Rule:

Two thirds of the dose, from the age of 14 to 16.—One half, from 7 to 10.—One-third, from 4 to 6.—One-fourth, to one of 3 years.—One-eighth to one of a year.

It is customary to repeat the dose of an aperient medicine about every three hours till it operates, or to have recourse to a lavement, which in cases of obstinate costiveness is often preferable.

MEDICINES.	DOSES.			Proper Vehicle, &c.	Effects, &c.	Diseases;—proper for
	Adults.	Children from 2 to 4 years				
Magnesia	20 to 40 grains	5 to 10 grains		mint water	absorbent	heartburn and acidity
Peruvian bark powder	20 to 60 grains	10 to 15 grains		mint wat. 4 or 6 times	tonic	ague, indigestion, weakness
Epsom salt	4 to 8 drams	2 to 3 drams		mint water	gentle aperient	costiveness
Mindererus's spirit	3 to 4 drams	1 to 2 drams		mint wat. 3 or 4 ti. a day	sudorific and cooling	fever, pleurisy
Tincture of Rhubarb	4 to 6 drams	1 to 2 drams		in mint water	aperient and carmin.	costiveness, colic, &c.
Paregoric elixir	1 to 2 drams	15 to 20 drops		barley wat. 4 ti. a day	anodyne	cough, asth. pain the bow.
Castor oil, cold expressed	4 to 10 drams	3 to 5 drams		mint water	purgative	colic, costiveness
Salt of wormwood	5 to 8 grains	1 to 4 grains		mint wat. twice a day	alkaline	heartburn, rickets



MEDICINES.	DOSES.		Proper Vehicle, &c.	Effects, &c.	Diseases;—proper for
	Adults.	Children from 2 to 4 years.			
Lemon acid			with salt of wormwood	saline mixture	fever
Antim. wine (as an emetic)	2 to 4 drams	1 to 3 drams	water	emetic	
Spirit sal volatile	20 to 40 drams	6 to 10 drops	ditto	stimulant	hysterical and fainting fits
Laudanum	10 to 30 drops	3 to 5 drops	mint water	anodyne	restlessn. acute pains, asth.
Spirit of camphor, external-ly for sprains, bruises, &c.					
Opodeldoc, externally for sprains, &c.					
Tinct. bark, Huxham's	2 to 4 drams	40 to 60 drops	Port wine 4 ti. a day	tonic	relaxation and weakness
Tinct. guaiac gum	1 to 3 drams	12 to 30 drops	water 2 or 3 ti. a day	stimulant and sudor.	chronic rheumatism, gout
Lavender, comp. sp. of	30 to 80 drops	10 to 20 drops	water	cordial	fainting, or lowness of spir.
Comp. Tinct. of Senna	1 to 3 drams	1 scrup to a dram	ditto	purgative	costiveness and colic
Ginger powder	20 to 30 grains	6 to 10 grains	ditto twice a day	stimulant	gout, indigestion, flatulence inflammation
Extract lead, externally		30 drops to $\frac{1}{2}$ pt. wa.			
Diluted vitriolic acid	12 to 20 drops	7 to 10 drops	camomile tea ditto	stomachic	indiges. flatulence, relaxa.
Tincture, myrrh	1 to 2 drams	10 to 15 drops	water ditto	strengthening	green sickness, debility, &c.
Ether	30 dps. to 1 dm.	8 to 10 drops	cold water	antispasmodic	asthma, cramp, and flatulen.
Rhubarb powder	20 to 30 grains	5 to 8 grains	in mint water	aperient	costiveness
Jalap powder	20 to 30 grains	5 to 10 grains	mint water	purgative	costiveness
Basilic do.	20 to 25 grains	6 to 8 grains	honey, twice a week	vernifuge & cathartic	worms, costiveness, dropsy.

MEDICINES.	DOSES.		Proper Vehicle, &c.	Effects, &c.	Diseases;—proper for
	Adults.	Children from 2 to 4 years.			
Com. cretaceous powd.	10 to 20 grains	5 to 8 grains	mint wa. every 3 or 4 h.	astrigent	obstinate purg. & dysentery
Tincture, asafetida	30 to 60 drops	1 to 2 drops	water, twice a day	antispasmodic	hysterics, asthma, whooping
Balsam of copaiva	20 to 40 drops	6 to 8 drops	in honey, ditto	diuretic and balsamic	whites, gleet, gravel
Ipecacuan powder	20 to 30 grains	5 to 10 grains	water	emetic	
Olive oil for liniments and ointments					
Oil of turpentine	15 to 20 drops	4 to 5 drops	honey, twice a day	diuretic, &c.	gleet, gravel, rheumatism
Spirit of hartshorn	20 to 40 drops	5 to 8 drops	water, 2 or 3 ti. a day	stimulant	hysterics, convul. heartburn
Tinct. ginger and cham.	10 to 40 drops	6 to 10 drops	ditto, 3 or 4 ditto	stomachic	gout, cramp in the stomach
Sweet spirit of nitre	20 to 60 drops	8 to 10 drops	barley water, 2 or 3 ti.	diuretic and febrifuge	strangury, heat of urine, fev.
Salt of steel	1 to 3 grains	$\frac{1}{2}$ to 1 grain	pill, twice a day	tonic	indigest. rickets, worms, &c.
Powdered nitre	5 to 20 grains	2 to 4 grains	barley water, 2 or 3 ti.	diuretic and febrifuge	strangury, heat of urine, fev.
Camphor	2 to 4 grains	1 to 2 grains	in a pill, twice a day	antispasmodic	whooping cough, convuls. fits
Aromatic tincture	3 to 4 drams	20 to 30 drops	water	astrigent	flatulence, indigestion
Prepared natron	5 to 10 grains	2 to 3 grains	mint water, 2 or 3 ti.	alterative	scrophula, heartburn, cancer
Essence of peppermint	3 to 6 drops	1 to 2 drops	water	carminative	colicky pains, flatulency, &c.
— cinnamon	3 to 10 drops	1 drop	ditto	stimulant	ditto
Tincture of gentian	1 to 2 drams	12 to 30 drops	water, 3 times a day	stomachic	indigestion, flatulence, &c.
Dover's powder	10 to 20 grains	3 to 6 grains	in water	sudorific and anodyne	rheumatism, recent colds, &c.
Antimonial ditto	from 3 to 5 grs.	1 to 3 grains	honey	sudorific	inflam. fever, pleurisy, &c.
Alum	3 to 10 grains	<u>1 to 2 drams</u>	water, 3 times a day	astrigent	flooding

MEDICINES.	DOSES.		Proper Vehicle, &c.	Effects, &c.	Diseases;—proper for
	Adults.	Children from 2 to 4 years.			
Vitriolated zinc (extern.)	10 grains		in a pint of water		inflammation of the eye.
Muriated tinct. of steel	10 to 30 drops	3 to 6 drops	water, twice a day	tonic	indigest. rickets, worms, &c
Cascarilla powder	10 to 20 grains	3 to 6 grains	mint water, 3 ti. a day	stomachic	indigestion, weakness
Hoffman's anodyne liq.	30 to 40 drops	6 to 10 drops	water, ditto	antispasmodic	nerv. fever, asthma, hysterics
Ipecacuan wine	4 to 8 drams	2 to 3 drams	ditto	emetic	
Senna leaves	1 to 2 drams	1 scrup. to dram	boiled in water	purgative	costiveness and colic
Bark powder	20 to 60 grains	10 to 15 grains	mint wat. 4 or 6 times	tonic	aguc, indigestion, weakness
Cream of tartar	1 to 4 drams	20 to 30 grains	honey, every morning	aperient & alterative	inflam. erupt. of the skin, &c.
Flowers of Sulphur	1 to 4 drams	20 to 30 grains	ditto, once a day	ditto	cutan. foulness, piles, worms
Calomel	1 to 2 grains	half to 1 grain	in a pill, twice a day	alterative	vene. disease, foul ulcers, &c.
Red precipitate					
Emetic tartar	1 to 2 grains	$\frac{1}{4}$ to $\frac{1}{2}$ grain	water	emetic	head-ache
Smelling salts					ditto
Acetic acid					
— salt of bark	5 to 10 grains	2 to 3 grains	Port wine, 4 times a day	tonic	relaxation and weakness
Opium powder	1 to 2 grains	$\frac{1}{4}$ grain	pill	anodyne	restlessn. acute pains, asth.
Essence of pennyroyal	6 to 8 drops			stimulating	flatulence, hysterics
Comp. colocynth pill	10 to 20 grains	4 to 8 grains	occasionally	purgative	costiveness
Squill pill	6 to 10 grains	1 to 3 grains	honey, twice a day	expectorant & diuretic	dropsy, asthm. chronic cough
Perry's essence					tooth-ache

THE  
MILITARY DISPENSARY,

FOR THE  
USE OF OFFICERS,  
CONTAINS

*Five bottles on the top for*

Magnesia	Epsom salt
Tincture of rhubarb	Opodeldoc
Huxham's tinct. rhubarb	

*Eight bottles in the drawer for*

Spirit of hartshorn	Liquid laudanum
Rhubarb powder	Essence for tooth-ache
Essence of peppermint	Emetic tartar
Antimonial powder	Prepared calomel

*Partitions for*

Preventive soap	Lint
Court plaster	Scales and weights

# COMPANION TO THE MILITARY CHEST.

MEDICINES.	DOSE.	Proper Vehicle, &c.	Effects, &c.	Diseases ;—proper for
Magnesia	20 to 40 grains	mint water	absorbent and aperient	heartburn and acidity
Tinct. of rhubarb	4 to 6 drams	ditto	aperient and carmin.	costiveness, colic, &c.
Huxham's tinct. bark	2 to 4 drams	water, 3 or 4 ti. a day	tonic	relaxation and weakness
Epsom salt	4 to 8 drams	mint water	gentle aperient	costiveness
Opodeldoc externally				sprains and bruises
Spirit of hartshorn	20 to 40 drops	water, 2 or 3 ti. a day	stimulant and sudor.	chronic, rheumatism, gout
Rhubarb powder	20 to 30 grains	in mint water	aperient	costiveness
Essence of peppermint	3 to 6 drops	water	carminative	colicky pains, flatulency, &c.
Antimonial powder	from 3 to 5 grs.	honey	sudorific	inflam. fever, pleurisy, &c.
Liquid Laudanum	10 to 30 drops	mint water	anodyne	restlessn. acute pains, asth.
Emetic tartar	1 to 2 grains	water	emetic	
Prepared calomel	1 to 2 grains	in a pill, twice a day	alterative	vene. disease, foul ulcers, &c.

**PREVENTIVE SOAP.**—This preparation is recommended by the Author of a Treatise on the Prevention and Treatment of the Venereal Disease, as an effectual preventive of the Venereal Disease, who gives the following instructions for its use :—“ With this soap it is only necessary to wash the external parts in the same manner as with common soap. This will effectually destroy the infectious matter of pox, but if the subject be affected with clap, it will also be necessary to wash out the urethra with water, rendered slightly turbid by the soap, and for this purpose a syringe will be necessary.”



## CONTINENTAL DISPENSARY,

FOR THE USE OF TRAVELLERS TO

FRANCE, GERMANY, ITALY, HOLLAND, SPAIN, AND RUSSIA.

The largest, or first Size, contains in the upper Partition,

*Eight half-pint bottles, for*

Magnesia	Mindererus's spirit
Epsom salts	Cream of tartar
Castor oil	Flowers of sulphur
Tincture of rhubarb	Senna leaves

*Twenty-four wide and narrow-mouth square bottles, for*

Huxham's tinc. of bark	Vol. tinc. of guiac gum
Tincture of senna	Opodeldoc
Ditto camomile and ginger	Extract of lead
Spirit of lavender	Salt of wormwood
Paregoric elixir	Peruvian bark
Spirit of hartshorn	Ipecacuan powder
Ditto sal volatile	Rhubarb ditto
Sweet spirit of nitre	Jalap ditto
Vitriolic ether	Refined camphor
Antimonial wine	Cretaceous powder
Tincture of myrrh	Gum arabic
Diluted vitriolic acid	Purified nitre

*Eight bottles in a drawer, for*

Liquid Laudanum	Basilic powder
Essence of peppermint	Antimonl. febrifuge powder,
Prepared Calomel	commonly called James's
Emetic tartar	fever powder
Salt of steel	Camphorat. acetic acid

*Six pots in a drawer, for*

Blistering plaster	Brown cerate
Spermaceti ointment	Compd. colocynth pill
Yellow basilicon	Squill pill

*A large drawer, for*

Diachylon plaster	Tyle
Gum plaster	Pestle and mortar
Lint	Graduated measure and funnel
Court plaster	Lavement bag
Leather	Tourniquet
Spatula	Probang
Bolus knife	Book of directions, &c.
Box of scales and weights	

Complete, with medicines £9 15 0

---

The SECOND Size.

Containing eight half-pint bottles, eighteen 4 oz. bottles, six small bottles in a drawer, six pots for ointment and pills, partitions for plasters—spatula, bolus knife, scales and weights, pestle and mortar, graduated measure, tyle, lavement bag and pipe, tourniquet, probang, and book of directions. Complete with medicines, £8 16 0

---

The THIRD Size.

Containing, on the top, three half-pint bottles, twelve four ounce, a large drawer with five small bottles, five pots—pestle and mortar, graduated measure, scales and weights, bolus knife. Complete, with medicines and book of directions, £5 9 0



## DIRECTIONS

FOR THE

## USE OF THE CONTENTS

OF THE FIRST SIZE OF THE

## CONTINENTAL DISPENSARY.

MEDICINES.	DOSES.		Proper Vehicle, &c.	Effects, &c.	Diseases;—proper for
	Adults.	Children from 2 to 4 years.			
Magnesia	20 to 40 grains	5 to 10 grains	mint water	absorbent	heartburn and acidity
Epsom salt	4 to 8 drams	2 to 3 drams	ditto	gentle aperient	costiveness
Castor oil	4 to 10 drams	3 to 5 drams	ditto	purgative	colic, costiveness
Tincture of Rhubarb	4 to 6 drams	1 to 2 drams	ditto	aperient and carmin.	ditto ditto
Mindererus's spirit	4 drams	1 to 2 drams	ditto, 3 or 4 ti. a day	sudorific and cooling	recent inflam. fev. pleurisy
Cream of tartar	1 to 4 drams	20 to 30 grains	honey, every morning	aperient & alterative	inflam. erupt. of the skin, &c.
Flowers of sulphur	1 to 4 drams	20 to 30 grains	ditto, once a day	ditto	cutan. foulness, piles, worms
Senna leaves	1 to 3 drams	1 scrup. to dm.	water	purgative	costiveness and colic
Tinct. of bark, Huxham's	2 to 4 drams	40 to 60 drops	ditto, 4 times a day	tonic	relaxation and weakness
Tincture of senna	6 to 12 drams		ditto	purgative	costiveness and colic
Tinct. ginger and cham.	10 to 40 drops		ditto, 3 or 4 times a day	stomachic	gout, cramp in the stomach
Spirit of lavender	30 to 80 drops	10 to 20 drops	ditto	cordial	fainting, or lowness of spirits
Paregoric elixir	1 to 2 drams	15 to 20 drops	barley water, 4 ti. a day	anodyne	cough, asth. pain the bow.

MEDICINES.	DOSES.		Proper Vehicle, &c.	Effects, &c.	Diseases;—proper for
	Adults.	Children from 2 to 4 years.			
Spirit of hartshorn	20 to 40 drops	5 to 8 drops	water, 2 or 3 ti. a day	stimulant & sudorific	chronic rheumatism, gout
Spirit sal volatile	20 to 40 drops	6 to 10 drops	water	stimulant	hysteria and fainting fits
Sweet spirit of nitre	15 to 30 drops	6 to 12 drops	barley water	diuretic & febrifuge	strangury, gravel, fevers
Vitriolic ether	30 dps. to 1 dm.	8 to 10 drops	cold water	antispasmodic	asthma, cramp, & flatulence
Antimonial wine	2 to 4 drams	1 to 3 drams	water	emetic	
Tincture of myrrh	1 to 2 drams	10 to 15 drops	ditto, 2 or 3 ti. a day	strengthening	green sickness, weakness
Diluted vitriolic acid	8 to 12 drops	4 to 5 drops	camo. tea, twice a day	stomachic	indiges. flatulence, relaxa.
Vol. tinct. guaiac gum	1 to 3 drams		water, 2 or 3 ti. a day.	stimulant & sudorific	chronic rheumatism, gout
Opodeldoc (extern.)			ditto		sprains, bruises, &c.
Extract of lead			in water		inflammation
Salt of wormwood	5 to 8 grains	1 to 4 grains	mint water, twice a day	alkaline	heartburn, rickets
Peruvian bark	20 to 60 grains	10 to 15 grains	ditto, 4 or 6 ti. a day	tonic	ague, indigestion, weakness
Ipecacuan powder	20 to 30 grains	5 to 10 grains	water	emetic	
Rhubarb powder	20 to 30 grains	5 to 8 grains	in mint water	aperient	costiveness
Jalap powder	20 to 30 grains	5 to 10 grains	ditto	purgative	costiveness
Refined camphor	2 to 4 grains	1 to 2 grains	in a pill, twice a day	antispasmodic	hooping cough, convuls, fits
Cretaceous powder	10 to 20 grains	5 to 8 grains	mint wa. every 3 or 4 h.	astringent	obstinate purg. & dysentery
* Gum arabic					

\* Gum Arabic is given with the purified nitre (in the same doses, in cases of strangury, gravel, heat of urine, and recent cough, attended with fever.

MEDICINES.	DOSES.		Proper Vehicle, &c.	Effects, &c.	Diseases ;—proper for
	Adults.	Children from 2 to 4 years.			
Purified nitre	15 to 20 grains	6 to 12 drops	barley water	diuretic & febrifuge	strangury, gravel, fevers
Liquid Laudanum	10 to 20 drops	$\frac{1}{4}$ to 6 drops	mint water	anodyne	restlessn. acute pains, asth.
Essence of peppermint	3 to 6 drops	1 to 2 drops	water	carminative	colicky pains, flatulency, &c.
Prepared calomel	1 to 2 grains	$\frac{1}{2}$ to 1 grain	in a pill, twice a day	alterative	ven. disease, foul ulcers, &c.
Emetic tartar	1 to 2 grains	$\frac{1}{4}$ to $\frac{1}{2}$ grain	water	emetic	
Salt of steel	1 to 3 grains	$\frac{1}{2}$ to 1 grain	ditto twice a day	tonic	indigest. rickets, worms, &c.
Basilic powder	20 to 25 grains	6 to 8 grains	honey, twice a week	vermifuge & cathartic	worms, costiveness, dropsy
Antimonial powder	from 3 to 5 grs.	1 to 3 grains	ditto	sudorific	inflam. fever, pleurisy, &c.
Camphorated acetic acid, for smelling					head-ach.
Compound colocynth pill	10 to 20 grains	4 to 8 grains	occasionally	purgative	costiveness
Squill pill	6 to 10 grains	1 to 3 grains	twice a day	expectorant & diuretic	dropsy, asth. chronic cough

## FAMILY DISPENSARY.

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THIS chest is furnished with such medicines, which, from their great utility, one person at least in every village ought to be provided. The advantages of such a provision are too numerous to be detailed, and too obvious to be denied. It affords an immediate resource in those sudden attacks of disease, and contingencies of misfortune, in which it is absolutely necessary relief should be *speedy* to be *effectual*. In cases of fits, suffocation, poisons, burns, scalds, &c. every medical man must acknowledge the good it may do, and the evil it may prevent.

Charity thus bestowed, in alleviating the sickness of the indigent individual, is of all others the most useful and commendable. What satisfaction can, indeed, be equal to mitigating the sufferings and still more, in often being able to save the lives of our fellow creatures? To a heart glowing with the true spirit of Christian charity, can any thing possibly be so gratifying as to restore the bloom of health to the wan and faded cheek of poverty and disease? A point of no less importance is, that the Family Medicine Chest is supplied with drugs very superior in quality to those generally sold in the country, and on the purity of which the greatest reliance may be placed.

Besides, a family possessing a collection of such medicines as they are in the habit of using, from a respectable source, are not exposed to those serious mistakes which so frequently happen in the country, through the ignorance or carelessness of young men employed in druggists' and



apothecaries' shops, by selling poisons, for articles resembling them in appearance.

In this chest, the size of bottles, &c. is proportioned to the utility and potency of the articles they are intended to contain, viz.

*Five bottles in the back part for*

No. 1. Magnesia	No. 3. Castor Oil
2. Rochelle salt, or Epsom salt, or the tasteless purging salt	4. Tinct. of Rhubarb
	5. Opodeldoc

*Five bottles in the front part for*

No. 6. Huxham's tinct. bark	No. 9. Comp. spirit of la- vender
7. Tinct. ginger and camomile	10. Mindererus's spirit
8. Comp. tinct. of senna	11. Paregoric elixir

*Nine bottles in the right wing, for*

12. Spirit of hartshorn	17. Tincture of myrrh
13. Spirit of sal. volatile	18. Diluted vitriolic acid
14. Vitriolic æther	19. Tincture of asafætida
15. Sweet spirit of nitre	20. Volatile tincture of guaiac gum
16. Antimonial wine	

*Nine bottles in the left wing, for*

21. Salt of Wormwood	26. Rhubarb powder
22. Crystallized acid of le- mon	27. Jalap ditto
23. Ipecacuan powder	28. Refined camphor
24. Essent. salt of bark, or	29. Compound cretaceous powder
25. Salt of steel	30. Extract of lead

*Nine small bottles in a drawer, for*

No. 31. Liquid Laudanum	No. 35. Emetic tartar
32. Essence of pepper-mint	36. Basilic powder
33. Essence of cinnamon	37. Antimonial powder
34. Prepared calomel	38. Camph. acetic acid.
	39. Smelling salts

*Six pots in a drawer, for*

40. Blistering plaster	44. Savin ointment
41. Spermaceti ointment	45. Squill pill
42. Brown cerate	46. Comp. colocynth pill
43. Yellow basilicon	47. Lenitive electuary

*Six drawers in the front, with partitions, for*

48. Peruvian bark, or Rhatany root powder	55. Flowers of sulphur
49. Jamaica ginger, do.	56. Court plaster
50. Seena leaves	57. Lint and plaster skins
51. Flaky manna	58. Diachylon
52. Gum arabic powder	59. Ditto with gum
53. Purified nitre do.	60. Prepared natron
54. Cream of Tartar	61. Tincture for tooth-ache

*Two large drawers on the front, for*

Pestle and mortar	Funnel and tyle
Graduated oz. measure	A lavement bag, with pipes for adults and children
Ditto drop ditto	A small male and female syringe
Ivory scales, weights	A probang
Spatula, bolus knife	A Tourniquet
A pair of scissars	
Silver spoon	

Complete £20 8 6

The SECOND Size,  
Containing every article specified above.  
Complete £17 10 0

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The THIRD Size,  
With four bottles on the back, five on the front, nine in each wing, six in a drawer—three small and three large drawers—six pots for ointments and pills, furnished with medicines—pestle and mortar, graduated measure, funnel, ivory scales and weights, spatula, bolus knife, lavement bag and pipe, syringe, book of directions, &c.  
Complete £13 10 0

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The FOURTH Size,  
Containing the same articles as the foregoing.  
Complete £10 6 0

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The FIFTH Size,  
Containing four bottles on the back, five on the front, six in each wing, six small ones in a drawer—four large and two small drawers—six pots for ointments and pills, furnished with medicines, pestle and mortar, funnel, measure, bolus knife, spatula, lavement bag and pipe, with book of directions, &c. Complete £8 12 0

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The SIXTH Size,  
Containing three bottles on the back part, four in the front, six in each wing, six in a drawer, two drawers furnished, with medicines, pestle and mortar, spatula, bolus knife, graduated measure, scales and weights, book of directions, &c. Complete £6 6 0



## COMPANION

TO THE

## FAMILY DISPENSARY.

MEDICINES.	DOSES.		Proper Vehicle, &c.	Effects, &c.	Diseases ;—proper for
	Adults.	Children from 2 to 4 years			
Magnesia	20 to 40 grains	5 to 10 grains	mint water	absorbent	heartburn and acidity
Epsom salt	4 to 8 drams	2 to 3 drams	mint water	gentle aperient	costiveness
Castor oil, cold expressed	4 to 10 drams	3 to 5 drams	mint water	purgative	colic, costiveness
Tincture of Rhubarb	4 to 6 drams	1 to 2 drams	in mint water	aperient and carmin.	costiveness, colic, &c.
Opodeldoc, externally for sprains, &c.					
Tinct. bark, Huxham's	2 to 4 drams	40 to 60 drops	Port wine 4 ti. a day	tonic	relaxation and weakness
Tinct. ginger and cham.	10 to 40 drops	6 to 10 drops	ditto, 3 or 4 ditto	stomachic	gout, cramp in the stomach
Comp. Tinct. of Senna	1 to 3 drams	1 scrup to a dram	ditto	purgative	costiveness and colic
Lavender, comp. sp. of	30 to 80 drops	10 to 20 drops	water	cordial	fainting, or lowness of spir.

MEDICINES.	DOSES.		Proper Vehicle, &c.	Effects, &c.	Diseases;—proper for
	Adults.	Children from 2 to 4 years.			
Mindererus's spirit	3 to 4 drams	1 to 2 drams	mint wat. 3 or 4 ti. a day	sudorific and cooling	fever, pleurisy
Paregoric elixir	1 to 2 drams	15 to 20 drops	barley wat. 4 ti. a day	anodyne	cough, asth. pain the bow.
Spirit of hartshorn	20 to 40 drops	5 to 8 drops	water, 2 or 3 ti. a day	stimulant	hysterics, convul. heartburn
Spirit sal volatile	20 to 40 drops	6 to 10 drops	ditto	stimulant	hysterical and fainting fits
Ether	30 dps. to 1 dm.	8 to 10 drops	cold water	antispasmodic	asthma, cramp, and flatulen.
Sweet spirit of nitre	20 to 60 drops	8 to 10 drops	barley water, 2 or 3 ti.	diuretic and febrifuge	strangury, heat of urine, fev.
Antim. wine (as an emetic)	2 to 4 drams	1 to 3 drams	water	emetic	
Tincture, myrrh	1 to 2 drams	10 to 15 drops	water	strengthening	green sickness, debility, &c.
Diluted vitriolic acid	12 to 20 drops	7 to 10 drops	camomile tea ditto	stomachic	indiges. flatulence, relaxa.
Tincture, asafetida	30 to 60 drops	1 to 2 drops	water, twice a day	antispasmodic	hysterics, asthma, hooping
Tinct. guaiac gum	1 to 3 drams	12 to 30 drops	water 2 or 3 ti. a day	stimulant and sudor.	chronic rheumatism, gout
Salt of wormwood	5 to 8 grains	1 to 4 grains	mint wat. twice a day	alkaline	heartburn, rickets
Lemon acid			with salt of wormwood	saline mixture	fever
Ipecacuan powder	20 to 30 grains	5 to 10 grains	water	emetic	
Essential salt of bark	5 to 10 grains	2 to 4 grains	4 times a day	tonic	débilité of stomach, &c.
Salt of steel	1 to 3 grains	$\frac{1}{2}$ to 1 grain	pill, twice a day	tonic	indigest. rickets, worms, &c.
Rhubarb powder	20 to 30 grains	5 to 8 grains	in mint water	aperient	costiveness
Jalap powder	20 to 30 grains	5 to 10 grains	mint water	purgative	costiveness
Camphor	2 to 4 grains	1 to 2 grains	in a pill, twice a day	antispasmodic	hooping cough, convuls. fits
Comp. cretaceous powd.	10 to 20 grains	5 to 8 grains	mint wa. every 3 or 4 h.	astringent	obstinate purg. & dysentery
Extract lead, externally		30 dropsto $\frac{1}{2}$ pt. wa.			inflammation

MEDICINES.	DOSES.		Proper Vehicle, &c.	Effects, &c.	Diseases ;—proper for
	Adults.	Children from 2 to 4 years.			
Laudanum	10 to 30 drops	3 to 5 drops	mint water	anodyne	restlessn. acute pains, asth.
Essence of peppermint	3 to 6 drops	1 to 2 drops	water	carminative	colicky pains, flatulency, &c
— cinnamon	3 to 10 drops	1 drop	ditto	stimulant	ditto
Calomel	1 to 2 grains	half to 1 grain	in a pill, twice a day	alterative	venec. disease, foul ulcers, &c.
Emetic tartar	1 to 2 grains	$\frac{1}{4}$ to $\frac{1}{2}$ grain	water	emetic	
Basilic powder	20 to 25 grains	6 to 8 grains	honey, twice a week	vermifuge & cathartic	worms, costiveness, drops.
Antimonial ditto	from 3 to 5 grs.	1 to 3 grains	honey	sudorific	inflam. fever, pleurisy, &c.
Smelling salts					head-ache
Acetic acid					ditto
Squill pill	6 to 10 grains	1 to 3 grains	honey, twice a day	expectorant & diuretic	dropsy, asthm. chronic cough
Comp. colocynth pill	10 to 20 grains	4 to 8 grains	occasionally	purgative	costiveness
Bark powder	20 to 60 grains	10 to 15 grains	mint wat. 4 or 6 times	tonic	ague, indigestion, weakness
Ginger powder	20 to 30 grains	6 to 10 grains	ditto twice a day	stimulant	gout, indigestion, flatulence
Senna leaves	1 to 2 drams	1 scrup. to dram	boiled in water	purgative	costiveness and colic
Powdered nitre	5 to 20 grains	2 to 4 grains	barley water, 2 or 3 ti.	diuretic and febrifuge	strangury, heat of urine, fev.
Cream of tartar	1 to 4 drams	20 to 30 grains	honey, every morning	aperient & alterative	inflam. erupt. of the skin, &c.
Flowers of Sulphur	1 to 4 drams	20 to 30 grains	ditto, once a day	ditto	cutan. foulness, piles, worms
Prepared natron	5 to 10 grains	2 to 3 grains	mint water, 2 or 3 ti.	alterative	scrophula, heartburn, cancer

# THE LADY'S DISPENSARY,

CONTAINS IN THE UPPER PART

*Twelve bottles, for*

Epsom salt	Salt of wormwood
Peruvian bark powder	Concrete acid of lemon
Castor oil	Camphorated spirit
Tincture of rhubarb	Huxham's tinct. bark
Spirit sal volatile	Tincture of Rhatany
Comp. spirit of lavender	

*Six bottles in the drawer, for*

Rhubarb powder	Ipecacuanha
Laudanum	Camphorated acetic acid
Essence of peppermint	Tincture for tooth-ache

*Two boxes in the drawer, for*

Acepraetic pill	Tonic pill
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With graduated measure, pestle and Mortar, scales and weights, bolus knife, and book of directions £5 10 0

# COMPANION TO THE LADY'S DISPENSARY.

MEDICINES.	DOSE.	Proper Vehicle, &c.	Effects, &c.	Diseases ;—proper for
Magnesia	30 grains	peppermint water	aperient	heartburn
Epsom salt	half ounce	ditto	ditto	costiveness
Peruvian bark	half a drachm	ditto	strengthening	ague, debility
Castor oil	2 table spoonfuls	ditto	aperient	costiveness, colic
Tincture of rhubarb	2 ditto	water	ditto	colic, flatulence
Spirit sal volatile	30 drops	ditto	carminative	lowness of spirits, fits
Comp. spirit of lavender	a teaspoonful	ditto	cordial	lowness, flatulence
Salt of wormwood	10 grains	peppermint ditto	anti acid	heartburn
Concrete acid of lemon	20 grains	a glass of peppermint water with 20 grains of salt of wormwood	saline	fever



MEDICINES.	DOSE.	Proper Vehicle, &c.	Effects, &c.	Diseases;—proper for
Huxham's tinct. bark	a table spoonful	water	stomachic and cordial	indigestion, debility
Tincture of Rhatany	see below			
Rhubarb powder	20 to 30 grains	peppermint ditto	aperient	costiveness
Laudaunum	5 to 30 drops	ditto	anodyne	pain in the stomach, cough, rheumatism
Essence of peppermint	5 to 6 drops	water	carminative	pain in the stomach, flatulence
Ipecacuanha powder	20 grains	ditto	emetic	
Camphorated acetic acid		to smell	to purify infected air	head-ache
Tincture for tooth-ache, with printed directions				
Ephraëtic pills	2 pills	twice a day	slightly aperient	menstrual obstruction
Tonic pills	3 do.	ditto	strengthening	fluor albus, gleet, indiges.

The Tincture of Rhatany is employed instead of the Tincture of Myrrh, with the Areca Charcoal, to clean the teeth. It has the property of constringing or strengthening the gums, preventing caries of the teeth and tooth-ache, rendering the teeth firm and healthy, and the breath sweet.

## THE GENTLEMAN'S DISPENSARY.

This Case is made flat for the convenience of travelling.

IT CONTAINS IN THE UPPER PART

*Ten bottles, for*

Magnesia	Comp. tincture of senna
Huxham's tinct. bark	Peruvian bark
Tincture of rhubarb	Nitre powder
Epsom salt	Gum arabic ditto
Aperient pills	Tincture of Rhatany
Tonic pills	

*Ten small bottles in the drawer, for*

Laudanum	Acetated lead
Calomel pills	Tincture for tooth-ache
Ditto ditto with opium	Antimonial powder
Vitriolated zinc	

*Partitions for*

Lint	Preventive soap
A pot of white Mercurial ointment	Graduated measure
Court plaster	Pestle and mortar
	Scales and weights

Complete £6 16 0

Each calomel pill contains two grains of calomel.

This chest is accompanied with a book of directions.

The tincture of Rhatany is used for the purpose of cleaning the teeth, and sponging the gums. With the Areca charcoal powder it renders the teeth white and firm in their sockets, prevents caries and tooth-ache, strengthens the gums, and sweetens the breath.



## THE

## COUNTRY CLERGYMAN'S DISPENSARY.

This chest is made on a very cheap plan, and supplied with black bottles.

The FIRST Size contains

*Eight half-pint bottles, for*

Magnesia	Mindererus's spirit
Epsom salts	Cream of tartar
Castor oil	Flowers of sulphur
Tincture of rhubarb	Senna leaves

*Twenty-four wide and narrow-mouth square bottles, for*

Huxham's tinc. of bark	Vol. tinc. of guaiac gum
Tincture of senna	Opodeldoc
Ditto camomile and ginger	Extract of lead
Spirit of lavender	Salt of wormwood
Paregoric elixir	Peruvian bark
Spirit of hartshorn	Ipecacuan powder
Ditto sal volatile	Rhubarb ditto
Sweet spirit of nitre	Jalap ditto
Vitriolic ether	Refined camphor
Antimonial wine	Cretaceous powder
Tincture of myrrh	Gum arabic
Diluted vitriolic acid	Purified nitre

*Eight bottles in a drawer, for*

Liquid Laudanum	Basilic powder
Essence of peppermint	Antimonl. febrifuge powder, commonly called James's
Prepared Calomel	fever powder
Emetic tartar	Camphorat. acetic acid
Salt of steel	

*Six pots in a drawer, for*

Blistering plaster	Brown cerate
Spermaceti ointment	Compd. colocynth pill
Yellow basilicon	Squill pill

*A large drawer, for*

Diachylon plaster	Tyle
Gum plaster	Pestle and mortar
Lint	Graduated measure and funnel
Court plaster	Lavement bag
Leather	Tourniquet
Spatula	Probang
Bolus knife	Book of directions, &c.
Box of scales and weights	

Complete, with medicines £9 5 0

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## The SECOND Size.

Containing eight half-pint bottles, eighteen 4 oz. bottles, six small bottles in a drawer, six pots for ointment and pills, partitions for plasters—spatula, bolus knife, scales and weights, pestle and mortar, graduated measure, tyle, lavement bag and pipe, tourniquet, probang, and book of directions. Complete with medicines, £8 6 0

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## The THIRD Size.

Containing, on the top, three half-pint bottles, twelve four ounce, a large drawer with five small bottles, five pots—pestle and mortar, graduated measure, scales and weights, bolus knife. Complete, with medicines and book of directions, £5 9 0

## THE VESTRY MEDICINE CHEST.

This small chest was first made for the use of the parish church of Wanstead, by the direction of the late Rev. Dr. Glasse. In cases of fainting, or hysteric fits, which often occur during divine service, it has been found very serviceable.

### IT CONTAINS

*Four bottles, for*

Spirit of hartshorn	Smelling salts, and
Spirit of sal volatile	Two glasses

From £1. to £1. 10s. 6d.

## COMPANION

TO THE

## COUNTRY-CLERGYMAN'S DISPENSARY.

MEDICINES.	DOSES.		Proper Vehicle, &c.	Effects, &c.	Diseases;—proper for
	Adults.	Children from 2 to 4 years.			
Magnesia	20 to 40 grains	5 to 10 grains	mint water	absorbent	heartburn and acidity
Epsom salt	4 to 8 drams	2 to 3 drams	ditto	gentle aperient	costiveness
Castor oil	4 to 10 drams	3 to 5 drams	ditto	purgative	colic, costiveness
Tincture of Rhubarb	4 to 6 drams	1 to 2 drams	ditto	aperient and carmin.	ditto
Mindererus's spirit	4 drams	1 to 2 drams	ditto, 3 or 4 ti. a day	sudorific and cooling	recent inflam. fev. pleurisy
Cream of tartar	1 to 4 drams	20 to 30 grains	honey, every morning	a perient & alterative	inflam. erupt. of the skin, &c.
Flowers of sulphur	1 to 4 drams	20 to 30 grains	ditto, once a day	ditto	cutan. foulness, piles, worms
Senna leaves	1 to 3 drams	1 scrup. to dnl.	water	purgative	costiveness and colic
Tinct. of bark, Huxham's	2 to 4 drams	40 to 60 drops	ditto, 4 times a day	tonic	relaxation and weakness
Tincture of senna	6 to 12 drams		ditto	purgative	costiveness and colic
Tinct. ginger and cham.	10 to 40 drops		ditto, 3 or 4 times a day	stomachic	gout, cramp in the stomach
Spirit of lavender	30 to 80 drops	10 to 20 drops	ditto	cordial	fainting, or lowness of spirits
Purgoric elixir	1 to 2 drams	15 to 20 drops	barley water, 4 ti. a day	anodyne	cough, asth. pain the bow.

MEDICINES.	DOSES.		Proper Vehicle, &c.	Effects, &c.	Diseases;—proper for
	Adults.	Children from 2 to 4 years.			
Spirit of hartshorn	20 to 40 drops	5 to 8 drops	water, 2 or 3 ti. a day	stimulant & sudorific	chronic rheumatism, gout
Spirit sal volatile	20 to 40 drops	6 to 10 drops	water	stimulant	hysterie and fainting fits
Sweet spirit of nitre	30 to 40 drops	6 to 12 drops	barley water	diuretic & febrifuge	strangury, gravel, fevers
Vitriolic ether	30 dps. to 1 dm.	8 to 10 drops	cold water	antispasmodic	asthma, cramp, & flatulence
Antimonial wine	2 to 4 drams	1 to 3 drams	water	emetic	
Tincture of myrrh	1 to 2 drams	10 to 15 drops	ditto, 2 or 3 ti. a day	strengthening	green sickness, weakness
Diluted vitriolic acid	8 to 12 drops	4 to 6 drops	camo. tea, twice a day	stomachic	indiges. flatulence, relaxa.
Vol. tinct. guaiacae gum	1 to 3 drams		water, 2 or 3 ti. a day.	stimulant & sudorific	chronic rheumatism, gout
Opodeldoc (extern.)			ditto		sprains, bruises, &c.
Extract of lead, do.			in water		inflammation
Salt of wormwood	5 to 8 grains	1 to 4 grains	mint water, twice a day	alkaline	heartburn, rickets
Peruvian bark	20 to 60 grains	10 to 15 grains	ditto, 4 or 6 ti. a day	tonic	ague, indigestion, weakness
Ipecacuan powder	20 to 30 grains	5 to 10 grains	water	emetic	
Rhubarb powder	20 to 30 grains	5 to 8 grains	in mint water	aperient	costiveness
Jalap powder	20 to 30 grains	5 to 10 grains	ditto	purgative	costiveness
Refined camphor	2 to 4 grains	1 to 2 grains	in a pill, twice a day	antispasmodic	hooping cough, convuls. fits
Cretaceous powder	10 to 20 grains	5 to 8 grains	mint wa. every 3 or 4 h.	astringent	obstinate purg. & dysentery
* Gum arabic					

\* Gum Arabic is given with the purified nitre (in the same dose), in cases of strangury, gravel, heat of urine, and recent cough, attended with fever.



MEDICINES.	DOSES.		Proper Vehicle, &c.	Effects, &c.	Diseases ;—proper for
	Adults.	Children from 2 to 4 years.			
Purified nitre	15 to 20 grains	6 to 12 drops	barley water	diuretic & febrifuge	strangury, gravel, fevers.
Liquid Laudanum	10 to 20 drops	2 to 6 drops	mint water	anodyne	restlessn. acute pains, asth.
Essence of peppermint	3 to 6 drops	1 to 2 drops	water	carminative	colicky pains, flatulency, &c.
Prepared calomel	1 to 2 grains	$\frac{1}{2}$ to 1 grain	in a pill, twice a day	alterative	ven. disease, foul ulcers, &c.
Emetic tartar	1 to 2 grains	$\frac{1}{4}$ to $\frac{1}{2}$ grain	water	emetic	
Salt of steel	1 to 3 grains	$\frac{1}{2}$ to 1 grain	ditto twice a day	tonic	indigest. rickets, worms, &c.
Basilic powder	20 to 25 grains	6 to 8 grains	honey, twice a week	vermifuge & cathartic	worms, costiveness, dropsy
Antimonial powder	from 3 to 5 grs.	1 to 3 grains	ditto	sudorific	inflam. fever, pleurisy, &c.
Camphorated acetic acid, for smelling					head-ach.
Compound colocynth pill	10 to 20 grains	4 to 8 grains	occasionally	purgative	costiveness
Squill pill	6 to 10 grains	1 to 3 grains	twice a day	expectorant & diuretic	dropsy, asth. chronic cough

# THE SEA MEDICINE CHEST,

FOR THE USE OF

NAVY SURGEONS AND CAPTAINS OF MERCHANTMEN.

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This case is made with deal, and furnished with black bottles.

## CONTENTS :

*Eight wide and narrow-mouth two-quart bottles, for*

Olive oil	Peruvian bark powder
Spirit of turpentine	Opodeldoc
Rectified spirit of wine	Flowers of sulphur
Epsom salt	Distilled vinegar

*Sixteen one-quart narrow and wide-mouth bottles, for*

Camphorated spirit of wine	Extract of lead
Sweet spirit of nitre	Tincture of rhubarb
Spirit of hartshorn	Paregoric elixir
Huxham's tincture of bark	Antimonial wine
Aromatic tincture	Castor oil
Comp. tincture of gentian	Magnesia
Ditto ditto senna	Purified nitre
Oil of almonds	Gum arabic

*Twelve pint bottles, for*

Vitriolic acid	Spirit of sal volatile
Nitric acid	Acid elixir of vitriol
Muriatic acid	Spirit of sal ammoniac
Tincture of myrrh	Tincture of opium
Comp. tincture of benzoin	Prepared kali
Volatile tinc. of guaiacum	Ether

*Thirteen half-pint bottles, for*

Muriatic tincture of steel	Tincture of asafœtida
Crystallized acid of lemon	Hoffman's anodyne liquor
Rhubarb powder	Tincture of squills
Jalap powder	Balsam copaivi
Prepared oyster shells	Tincture catechu
Refined camphor	Soluble tartar
Aromatic spices	Gum arabic powder

*Thirty four-ounce square bottles, for*

Prepared calomel	Granulated tin
Powdered opium	Red precipitate of mercury
Ipecacuan powder	White ditto
Emetic tartar	Corros. sublimate of ditto
Essence of peppermint	White vitriol
Acetic acid	Blue vitriol
Dover's powder	Sugar of lead
Antimonial powder	Prepared natron
Salt of steel	Golden sulphur of antimony
Lunar caustic	Caustic alkali
Comp. cretaceous powder	Guaiaicum powder
Essence of cinnamon	Cantharides ditto
Prepared ammonia	Hemlock ditto
Socotorine aloes powder	Sal ammoniac
Gum myrrh ditto	Prepared steel

*Six boxes, for*

Peruvian bark bruised	Gum plaster
Senna leaves	Adhesive ditto
Manna	Blistering ditto
Lint	Strengthening ditto
Tow and leather skins	Mercurial ditto
Diachylon plaster	

*Seven pots, for*

Strong mercurial ointment	Spermaceti ointment
Brown cerate	The Edinburgh ditto
Yellow basilicon	Conserve of hips
Opiate confection	

*Five small pots, for*

Cordial confection	Citrine ointment
Purified opium	Mercurial pills
Cathartic extract	

Scales and weights, pestle and mortar, spatula and bolus knives, graduated measures, funnels, tyles, syringes, clyster syringes and pipes, panican, tourniquet, probang, &c. &c. Complete, with book of directions,

£32 12 0

Second Size - - - - - 18 10 0

Third Size - - - - - 14 12 0

This Chest being for the use of the surgeon of the ship, a companion to it is not necessary. A copy of the Medical Guide for Tropical Climates accompanies the chest.

## *THE TRAVELLER'S DISPENSARY,*

Made flat, for the pocket of a carriage, or the convenience of travelling.

### CONTAINS ON THE TOP

*Five bottles in a row, for*

Magnesia	Rochelle salts
Tincture of rhubarb	Opodeldoc
Huxham's tinct. of bark	

*Five smaller bottles in a drawer, for*

Spirit of hartshorn	Ipecacuan powder
Rhubarb powder	Laudanum
Essence of peppermint	Prepared calomel
Antimonial powder	

*A drawer, for*

Court plaster	Scales and weights
Lint	Book of directions
	Complete £3 10 0

## PORTABLE CHEST OF CHEMISTRY.

THE chief preparations that compose a chemical chest should be arranged to answer the views of particular professions or descriptions of persons; and the first step, previous to entering upon the different subjects of investigation that belong peculiarly to each class, is to form the *plan* of the chest, corresponding to these intentions.

The following is a description of the largest portable chest of chemical re-agents, &c. kept at the Chemical and Medical Hall, 171, Piccadilly. On the top are partitions for forty-six stopper bottles of different sizes, with wide and narrow mouths, for the following articles. Each bottle, independent of a label, has a number engraved upon it, that in case the paper label should be destroyed, the contents of the bottle may be ascertained by the following numerical arrangement.

- |                          |                       |
|--------------------------|-----------------------|
| 1. Black Oxid Manganese. | 6. Muriatic Acid.     |
| 2. Metallic Zinc.        | 7. Nitric Acid.       |
| 3. Metallic Nickel.      | 8. Carbonate Soda.    |
| 4. Carbonate Potash.     | 9. Carbonate Ammonia. |
| 5. Sulphuric Acid.       | 10. Muriate Lime.     |



- |                             |                             |
|-----------------------------|-----------------------------|
| 11. Solut. Pure Potash.     | 28. Metallic Bismuth.       |
| 12. Solut. Pure Ammonia     | 29. Solut. Succinate Am-    |
| 13. Solution Sulphate Iron. | monia.                      |
| 14. Prussiate Potash and    | 30. Phosphorus.             |
| Iron.                       | 31. Oxymuriate Potash.      |
| 15. Tinct. Galls.           | 32. Oxymuriate Mercury.     |
| 16. Solut. Mur. Tin.        | 33. Sulphuret Ammonia.      |
| 17. Sulphuret Potass.       | 34. Solut. Nitrate Silver.  |
| 18. Solut. Acetite Lead.    | 35. Phosphuret Lime.        |
| 19. Solut. Oxalate Ammo-    | 36. Nitrate Copper.         |
| nia.                        | 37. Muriate Ammonia.        |
| 20. Solut. Nitrate Lead.    | 38. Citric Acid.            |
| 21. Solution Sulphate Man-  | 39. Solut. Nitrate Mercury. |
| ganese.                     | 40. Pure Strontia.          |
| 22. Crys. Boracic Acid.     | 41. Pure Barytes.           |
| 23. Solut. Nitrate Barytes. | 42. Muriate Cobalt.         |
| 24. Solut. Muriate Copper.  | 43. Acetic Acid.            |
| 25. Sulphuric Ether.        | 44. Tinct. Soap.            |
| 26. Alcohol.                | 45. Ammoniaret of Copper.   |
| 27. Oxalic Acid.            | 46. Solut. Mur. Gold.       |

In the drawer there are six stopper bottles for the following articles :

- |                 |                             |
|-----------------|-----------------------------|
| 47. Black Flux. | 50. Glacial Acid of Phos-   |
| 48. White Flux. | phorus.                     |
| 49. Dried Borax | 51. Glass of Borax, &c. &c. |

Four tin cases, for

- |                 |               |
|-----------------|---------------|
| Turmeric Paper. | Brazil Paper. |
| Litmus Paper.   | Gall Paper.   |

Also a drawer for scales and weights, graduated measure, funnel, knives, pestle and mortar, microscope, blow-pipe, and other apparatus for chemical experiments, with a copy of the Chemical Guide.

				£.	s.	d.
Largest size, complete	-	-	-	15	10	0
Second size, complete	-	-	-	10	10	0
Third size, complete	-	-	-	8	10	0
Fourth size, complete	-	-	-	5	10	0

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## THE MINERALOGICAL CHEST;

CONTAINING

RE-AGENTS, IMPLEMENTS, &c.

FOR THE

*Analysis, or Examination of Mineral Productions.*

					£.	s.	d.
First size, complete	-	-	-	-	10	10	0
Second size, complete	-	-	-	-	8	10	0
Third size, complete	-	-	-	-	6	10	0

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## THE VETERINARY CHEST,

OR

GENTLEMAN'S STABLE DISPENSARY;

CONTAINING

*One large drawer, with partitions, for*

Cathartic balls		Diuretic ditto
Strong ditto		Cordial ditto
Worm ditto		Cough ditto
Alterative ditto		Alterative powders

Nitre powder	Fœnugreek powder
Flowers of sulphur	Antimony ditto
Aniseed powder	Liver of ditto
Liquorice ditto	&c. &c.

*Nine bottles in the top part, for*

Spirit of wine and camphor	Embrocation for sprains
Spirit of turpentine	Goulard's extract
Opodeldoc	Laudanum
Oil of wild thyme	Distilled vinegar, &c.

*Four tin cases, with partitions, for*

Blistering or spavin ointment	Cooling ointment
	Healing ditto
Alterative, or grease ointment	Mercurial ditto
	Digestive ditto, &c.

*Six small bottles, for*

Corrosive sublimate	Butter of antimony
Lapis infernalis	Red precipitate, &c.

From £7. 10s. to £12. 6s. and upwards.

The great advantages of this chest consist in the medicines being carefully prepared with drugs of the best quality, instead of the trash generally sold for the use of horses, which possesses little or no medicinal properties.—The cases are made with mahogany and oak, and furnished with common glass bottles.

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At the Medical Hall, 171, Piccadilly, family medicine chests are re-furnished with medicines and bottles, or an allowance made for them in exchange for any of the improved Dispensaries.

AN  
ACCOUNT OF  
*USEFUL FAMILY PREPARATIONS,*

(CHIEFLY TAKEN FROM DR. REECE'S MEDICAL GUIDE.)

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PREPARED CHARCOAL.

WELL calcined charcoal, reduced to a fine powder, is, no doubt, a very innocent and excellent tooth-powder. It gives the teeth a fine, healthy, white, appearance; destroys the offensive effluvia arising from caries of the teeth, which is often so considerable as to contaminate the breath, and will not only prevent that disease of the enamel attributed to the scurvy, but even arrest its progress after it has taken place; and it is worthy of remark, that people who have suffered much from tooth-ach, have not experienced a return of it after the use of this powder. It is likewise very efficacious in destroying unpleasant tastes in the mouth, and for cleaning the tongue in cases of putrid fever, sore throat, and indigestion. The charcoal, prepared from the Areca nut, has been held in high estimation among the Indians; and Dr. Lind, late of Bengal, states, that by its use he has preserved all his teeth perfectly sound, although now arrived to the age of eighty; and several very respectable gentlemen who have resided many years in the East Indies, have assured us that it is esteemed a great preserver of the teeth, and a certain preventive against the tooth-ach. The charcoal of the Areca nut, (generally termed Betel nut in this country) certainly affords a more smooth powder than that of wood, and therefore, in cleaning the teeth, more efficacious. It also possesses an alkalescency, which renders the matter that adheres to the tooth more readily removed by the brush; a property from which the common charcoal is entirely exempt.

On the very respectable authority of Dr. Lind, we can have no hesitation in recommending its adoption in preference to that of



wood, particularly as it may now be procured with equal facility; the Areca nut having been imported expressly for the purpose of making charcoal.

The tooth powders recommended by many dentists, and those sold by perfumers, are composed of the most destructive minerals, which for a short time render the teeth white, but ultimately prove very injurious to the enamel. Indeed, such is the mischief that uniformly follows their use, that the introduction of the Areca charcoal into this country, may be considered as a great desideratum, and, as soon as its valuable properties are known, it will, no doubt, be generally adopted.

The tincture of Rhatany root, mixed with a little water, forms a very excellent astringent lotion for the teeth, and should always accompany the use of the prepared charcoal, or any other dentifrice. This tincture, from its peculiar astringent power, braces and strengthens the gums, and its repeated use has often succeeded in fastening loose teeth.

The tooth-powder, industriously advertised under the name of *Prepared Charcoal*, is not a genuine charcoal powder, but a composition of burnt oyster-shells, which in no respect resembles charcoal, and as a dentifrice, must prove injurious by abrading the enamel of the teeth. This composition is of a grey colour, whereas the charcoal is perfectly black.

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## ESSENTIAL SALT OF BARK.

THIS preparation, first introduced into practice in this country, by Dr. Charles J. Smyth, contains in a concentrated state, the volatile and active properties of the Peruvian bark, in a high degree of perfection, and answers every purpose of the powder, without producing the ill effects of nausea, vomiting, and purging, so much to be dreaded in diseases of debility, such as putrid sore throats, mortifications, and agues; cases in which no other preparation of this valuable medicine affords a proper substitute for the powder.

Ten grains of the essential salt are equal to a drachm of the bark in substance. It is much more pleasant to the palate, and agrees better with the stomach, and may, with equal advantage, be employed where the use of a strengthening medicine is indicated. In intermittent and remittent fevers, ten grains may be taken every



two hours, either in the form of pills, or dissolved in an ounce of camphorated julep; but for low fevers, putrid sore throat, and mortifications, red port wine is a proper vehicle; with which, in the proportion of three drachms to a quart, it makes an elegant tincture, possessing all the active properties of the Peruvian bark, and at the same time free from the pernicious effects of the ardent spirit of wine with which the different simple and compound tinctures are made.

In cases of indigestion, general weakness, whites, and gleet, the following form has been found to answer best :

Take of essential salt of bark, two drachms; dried soda, half a drachm; oil of caraways, ten drops. Mix them well together, and with simple syrup form a mass; to be divided into thirty-six pills, two or three of which are to be taken three times a day. If the patient cannot take pills, the solution of the salt of bark in port wine, as above directed, may be substituted for them.

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### INDIAN ARROW ROOT.

THE Indian arrow root has, of late years, been cultivated in considerable quantities in gardens and provision grounds in the West Indies. The following process for obtaining the fine powder, sold in this country, was communicated by a principal planter, for insertion in the Medical Guide :

“ The roots, when a year old, are dug up, well washed in water, and beaten in a large wooden mortar to a pulp. It is then thrown into a large tub of clean water, well washed, and the fibrous part wrung out by the hands and thrown away. The milky liquor being passed through a lawn sieve, or coarse cloth, is suffered to settle, and the clear water drained off. The white mass left at the bottom is again mixed with clean water, and strained; lastly, the mass is dried on sheets in the sun for use.”

This powder boiled in water forms a very pleasant transparent jelly, very superior to that of sago or tapioca, and is much recommended by Dr. Denman, Mr. Croft, and

other eminent practitioners, as a nutritious diet for children and invalids. The jelly is made in the following manner: to a dessert spoonful of the powder, add as much cold water as will make it into a paste, then pour on half a pint of boiling water, stir it briskly, and boil it a few minutes, when it will become a clear smooth jelly: a little sugar and sherry wine may be added for debilitated adults, but for infants a drop or two of essence of caraway seeds or cinnamon is preferable, wine being very liable to become acid in the stomachs of infants, and disagree with the bowels. Fresh milk, either alone or diluted with water, may be substituted for the water. For very debilitated frames, and especially for ricketty children, this jelly, blended with an animal jelly, as that of the stag's horn, affords a more nutritious diet than arrow root alone, which may be done in the following manner. Boil half an ounce of the true stag's horn\* shavings in a pint of water for fifteen minutes, then strain, and add two dessert spoonfuls of arrow root powder, previously well mixed with a tea-cupful of water; stir them briskly together and boil them for a few minutes. If the child should be much troubled with flatulency, from three to six drops of essence of caraway seeds, or a little grated nutmeg may be added; but for adults port wine or brandy will answer best.

Indeed, by this diet, I am well persuaded many children have been reared, which, had they been kept on the breast, and the customary spoonmeat, would have died. One

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\* Great care should be taken that the true stag's or hart's horn shavings be employed; as the shavings of the bleached bones of the calf, on account of being whiter and much cheaper, are generally sold for them. The latter do not impart so strong or wholesome a jelly as the stag's horn, the bones being nearly deprived of their glutinous property, by the process they undergo to render them white.

lady in particular, who adopted it, has now two children living, in perfect good health, after having lost five either by convulsions or bowel complaints.

The combination of animal and vegetable jellies is much recommended by Dr. Cadogan, in his popular treatise on the Management of Children; who justly attributes one-ninth of their diseases to being fed too much with vegetables. Such an admixture is similar to mother's milk, and probably very superior to the milk of an unhealthy woman.

Through the extravagant high price of six shillings a pound, at which this powder is sold, its consumption has been chiefly confined to opulent families. In order, however, that no class of invalids may be precluded from its use, I have directed it to be retailed at *four shillings* a pound, at the Chemical and Medical Hall, in Piccadilly; and as it is received in the original packages from one of the most respectable planters in the West Indies, I can take upon myself to say, that it is perfectly genuine, and equal, if not superior in quality, to that sold at double the price.

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### CHELTENHAM SALT.

THE aperient salt procured from Mr. Thompson's spa, near Cheltenham, is very different to any other aperient salt discovered in this or any other country. Independent of its purgative property, (being a sub-sulphate of soda) it corrects acidity in the stomach, and in consequence of being slightly impregnated with steel, it at the same time strengthens the stomach, and improves the general health. Hence this salt has proved very beneficial in a variety of diseases, especially those arising from bad digestion, which is the source of most of the chronic diseases to which man-



kind is subject. In affections of the liver, this salt is the only remedy in which the faculty places confidence. In diseases of the skin, it is also a most valuable medicine. Two drachms of this salt dissolved in half a pint of water, operate gently on the bowels. It is customary to continue this dose every morning for a week or fortnight, but the dose should be increased or diminished according to its effects. Two or three evacuations every day during its use is considered sufficient. One remarkable effect of this salt is that so far from nauseating the stomach (the common effect of other aperient salts), the person in a few minutes after taking it, feels a sense of hunger.

The great difficulty in obtaining the true Cheltenham salt, induced us to procure it from Cheltenham, and to make an arrangement with Mr. Thompson, to be regularly supplied with it. The article sold in bottles in the form of powder under the name of "True Cheltenham Salt," is a spurious preparation, made by drying a mixture of Glauber and Epsom salt. This preparation is very different to the true Cheltenham salt, although the proprietor pretends to make it from an analysis of the Cheltenham water; for in the first place it is a neutral salt, instead of being a sub-sulphate, and therefore does not possess the property of neutralizing acidity in the stomach. It is also free from any combination of steel, and therefore instead of strengthening the stomach, tends to debilitate that organ; and in weakly subjects, who might have received from the true Cheltenham salt the most essential benefit, it had done irreparable injury. Many again sell the small crystals of the Glauber salt for the true Cheltenham salt, the property of which is very different to the Cheltenham salt. The true Cheltenham salt may be distinguished from the spurious kinds by the largeness of its crystals, (resembling more the prepared

soda than Glauber salt), by a slight effervescence which ensues on the addition of a few drops of diluted vitriolic acid to a solution in water, and on a peculiar smell, resembling that of new sponge.

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### BASILIC NUT.

THIS nut is composed of the basili powder and gingerbread. The basili powder is the most effectual and safe remedy for the expulsion of every species of worms which form in the stomach and intestines, that has been discovered. It is also a very excellent alterative purgative medicine for children, as it not only carries off slime and crudities from the bowels, but also corrects the constitution and destroys a predisposition to the generation of worms. Combined with gingerbread it is more readily taken by children, and no portion lost, as is generally the case when administered in a liquid. The basili powder is given to children of all ages, every second and third morning, in the doses of four grains to a child of one year old, increasing one grain for every year to the age of twenty. In each nut containing twenty grains, the powder is so well blended, that it may be divided into doses proportioned to the age of the patient with accuracy.

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### ASARABACCA SNUFF.

THIS powder (the basis of which is the asarabacca herb) a most excellent cephalic. A few grains snuffed up the nose produces a considerable discharge of mucus from the internal surface and sneezing, by which the most obstinate head-ache, tooth-ache, complaints of the eyes, (particularly gutta serena, and weakness of sight) and paralytic and



other complaints, attended with stupor or drowsiness, have been effectually cured. Geoffroy states that after snuffing up four or five grains of this powder in an evening, he has found the discharge from the nose to continue for three days together, and this author observes that it so effectually clears the head and rouses the energy of the brain, that it has cured palsy of the tongue, and deafness. It is more efficacious in these complaints than the powder sold under the name of cephalic snuff, which is a compound of herbs of little or no medicinal virtue, as an application to the nostrils.

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### TINCTURE FOR TOOTH-ACHE.

THIS composition is the most efficacious remedy for tooth-ache that has been discovered. Being first prepared by Mr. Perry of Farnham, it is generally sold under the name of Perry's essence for the tooth-ache.

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### COLD EXPRESSED CASTOR OIL.

THE oil of the castor-seed expressed without heat is free from the unpleasant acrid taste of the castor oil imported from the West or East Indies, on account of greater care being taken in decorticating the seed (the oil of the rind being very acrid), and less heat employed in the process. As an aperient medicine it is equally efficacious.

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### SODAIC LOZENGE.

THIS is a very convenient form for taking the carbonate of soda, in cases of heartburn and flatulence. It is more

pleasant to the palate, and a more efficacious remedy for heartburn than the lozenge of magnesia.

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### SASSAFRAS NUT.

THE nut of the sassafras tree is of the same mealy and unctuous quality as the cocoa nut, from which chocolate is prepared ; in addition to which it contains the peculiar virtues of the root of the tree, sold under the name of sassafras wood, which has been long held in great estimation for its purifying and alterative properties. This aromatic quality, which is very grateful to the stomach, most invalids require for breakfast and evening repast, to promote digestion, and to a deficiency of this property in the customary breakfast and supper, is attributed the frequency of cases of indigestion generally termed bilious. It has been found highly beneficial in correcting the vitiated states of the constitutions from whence arise many diseases, such as eruptions of the skin, gout, rheumatism, and scrophula. In cases of debility of the stomach and a sluggish state of the liver and intestines, occasioning flatulence, costiveness, &c. it is much extolled. In asthma and consumption of the lungs it is much recommended by Dr. Reece.

The ground nut is used in the same manner as cocoa or coffee.

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### CITRATE OF SODA.

ON dissolving a tea-spoonful of this powder in a tumbler of water, an effervescence takes place, resembling soda water, than which it is far more grateful to the palate, and efficacious, in allaying thirst and cooling the

body. If the quantity of three tea-spoonfuls be taken, it will produce an aperient effect. This powder is esteemed particularly serviceable in allaying heat and restlessness attendant on full habits, in obviating costiveness, and abating hectic fever, and is a good remedy for various derangements of the stomach and bowels.

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### THE IGNITOR.

THIS little apparatus is particularly useful to light a candle in the night, in case of sudden attack of disease or alarm. It is free from the unpleasant smell of phosphorus or brimstone. To produce a flame, it is only necessary to dip one of the matches which accompany it in the bottle (not brimstone matches), and on taking it out the end will be found in a blaze, with which a candle may be lighted. This apparatus, which may be obtained for 7s. 6d. should be kept by every family. It is free from danger, and when the fluid is exhausted, may be replenished at the expense of a penny.

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## USEFUL FORMS OF MEDICINES.

### MIXTURES.

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#### *Stomachic Mixture.*

TAKE of the essential salt of bark one drachm; dissolve in half a pint of distilled water: then add tincture of Jamaica ginger and camomile, two drachms.

Two or three table-spoonfuls of this mixture may be taken three times a day. When acidity prevails in the stomach, a drachm of prepared natron, or a drachm of magnesia may be added.

For indigestion, attended with costiveness and a feverish state of the system, the following mixture is a favourite remedy of Dr. Baillie :

Take of infusion of red rose leaves, seven ounces; diluted vitriolic acid one drachm; Epsom salt three drachms; compound tincture of cardamon seeds six drachms. Mix.

Two or three table spoonfuls to be taken two or three times a day.

When there is a deficiency of bile, in consequence of the liver being in a sluggish state, Dr. Baillie prefers this mixture to the use of mercury. When the liver is loaded with lymph a little mercury is necessary, as recommended by Mr. Abernethy and Dr. Currie, viz.

About one grain of calomel made into a pill with conserve of hips, every other night for ten days or a fortnight.

When indigestion is attended with great debility of the system, swelling of the legs, or a disposition to dropsy, the following is preferable to the preceding mixture :

Take extract of rhatany a drachm and a half; muriated tincture of iron forty drops; compound spirit of juniper one ounce. Mix.

Two large table-spoonfuls to be taken three times a day.

When indigestion in this state of system is attended with costiveness, it is better to give a dose of active purgative pills once or twice a week, than to combine a purgative with a tonic medicine.

#### *Aperient Mixture.*

Take of senna leaves, two drachms; infuse in a quarter of a pint of boiling water for half an hour, then strain,



and add Rochelle or Epsom salt, half an ounce; compound tincture of senna, an ounce.

Three table-spoonfuls to be taken every two or three hours, till it operates.

In cases of obstinate costiveness or colic, a dessert-spoonful of castor oil may be taken in each dose of this mixture. A laxative clyster will be also necessary, if a speedy evacuation be required.

This mixture is more certain in its operation than any other purgative medicine, and therefore, in cases where it is of consequence to empty the bowels speedily, it should be preferred.

It is worthy of notice, that in acute fevers rhubarb and jalap will produce no sensible effect on the intestines, and in some constitutions the neutral salt, as the Epsom, Rochelle, &c. do not act as purgatives.

#### *Astringent mixture.*

Take of prepared oyster shells, two drachms; gum arabic powder, three drachms; laudanum, twenty drops; simple cinnamon water, six ounces; dissolve the gum arabic in a little cinnamon water, and afterwards rub with it the compound powder, then add the other ingredients.

Two table-spoonfuls to be taken after every loose stool, in cases of diarrhœa or dysentery.

This is a common mixture for excessive purging. When the object is to moderate and not effectually to restrain the discharge from the bowels, the following, which is a favourite prescription of Dr. Baillie's, is preferable.

Take of lime water seven ounces; compound tincture of cardamon seeds, six drachms; liquid laudanum, twenty drops. Mix.

Three table-spoonfuls to be taken every two or three hours.



*Anti-hysterical mixture.*

Take of tincture of asafœtida, three drachms; spirit of sal volatile, two drachms; camphorated julep, six ounces. Mix.

Two table-spoonfuls to be taken every three or four hours.

When hysterical fits are attended with general debility of the system, this is an useful remedy, but when they occur in full habits, the aperient mixture will succeed best.

*Cough mixture.*

Take of ipecacuan wine, two drachms, or ipecacuan powder, ten grains; gum arabic powder, four drachms; laudanum, twenty drops; simple oxymel, one ounce; almond emulsion, six ounces. Mix.

Two table-spoonfuls to be taken every two hours, for recent cough, pleurisy, and inflammation of the lungs.

For the purposes of allaying irritation in the lungs, and producing perspiration, this is a valuable mixture. In all cases of recent coughs, the bowels should be first emptied by the aperient mixture. If attended with stitches, a blister to the chest will be necessary, as well as the loss of blood, if the system be plethoric, and the cough attended with head-ach. In cases of recent cough, Dr. Latham prefers the following:

Take of Dover's powder, half a drachm; almond emulsion, seven ounces. Mix.

Two table-spoonfuls to be taken every three or four hours.

In cough of long standing, generally termed asthmatic cough, attended with difficulty of expectoration and general weakness of the system, without fever, the following mixture generally proves very beneficial.

Take of gum ammoniac emulsion, seven ounces; oxymel of squills, half an ounce; paregoric elixir, six drachms. Mix.

*Camphorated Bark mixture.*

Take of essential salt of bark, one drachm; dissolve in camphorated julep, six ounces; sweet spirit of nitre, two drachms. Mix.

Three table-spoonfuls to be taken every two or three hours, in low infectious fevers, putrid sore throat, and mortifications.

The bark thus associated, acts, as M. Lasonne has observed, with more energy and force, whether it be employed for the purpose of curing fever or gangrene; and this assertion Dr. Cullen believes, and experience has proved to be, well founded.

*Asthmatic mixture.*

Take of paregoric elixir, one ounce; camphorated julep six ounces; tincture of asafœtida, half an ounce; or vitriolic ether, three drachms; honey, half an ounce. Mix.

Two table-spoonfuls to be taken for chronic difficulty of breathing, and spasmodic asthma unattended with fever.

For spasmodic asthma, particularly when attended with flatulence, general debility, and increased irritability of the nervous system, this is a valuable mixture.

*Gout mixture.*

Take of volatile tincture of guaiacum, six drachms; camphorated mixture, six ounces; tincture of rhubarb, half an ounce; honey, half an ounce; rub the tincture of guaiacum with the honey in a glass mortar; then add the other article by degrees.

Two table-spoonfuls to be taken every four or five hours.

This mixture is employed as a restorative, after the inflammatory stage of gout is over.

The treatment of a paroxysm of gout must be regulated by the state of the constitution. In the robust and plethoric habit, the eau medicinale has been of great service, while in the debilitated frame it has speedily terminated the life of the patient. Nothing appears to be more beneficial in relieving the anguish of pain and shortening the fit, than perspiration. When this cannot be produced by medicine placing the limb over the vapour of warm water, or covering the surface with olive oil, generally affords wonderful relief.

*Anti-spasmodic mixture.*

Take of ether two drachms; spirit of sal volatile, a drachm and a half; liquid laudanum, thirty drops; camphorated mixture, six ounces. Mix.

Two table-spoonfuls to be taken every three or four hours, for spasmodic colic and asthma.

This is a very efficacious remedy in cases of spasms of the stomach. In colicky affections it should not be administered till three or four evacuations have been procured from the bowels, by means of the aperient mixture, unless attended with very acute pain in the bowels.

*Anti-rheumatic mixture.*

Take of volatile tincture of guaiacum, half an ounce; honey, half an ounce; camphorated julep, six ounces; rub the tincture of guaiac gum with the honey, in a glass mortar; and add the other articles by degrees.

Two table-spoonfuls to be taken three or four times a day for chronic rheumatism.

This mixture is only applicable to rheumatism, attended with debility and flatulence. For acute rheumatism, or rheumatism attended with fever, the following is a good remedy :

Take of Mindererus's spirit, three ounces ; Ipecacuan powder, ten grains ; pure water, five ounces ; essence of peppermint, fifteen drops. Mix.

Three table-spoonfuls to be taken every two hours, till it produces the desired effect.

All medicines administered to promote perspiration, should be assisted in their operation by the plentiful use of *tepid* drinks, such as warm barley water, gruel, tea, or the like.

The electric brush has lately been found very beneficial, both in chronic and acute rheumatism, and in rheumatic or nervous head-ach.

#### *Nervous Mixture.*

Take of essential salt of bark, one drachm, or extract of rhatany root, a drachm and a half ; dissolve in camphorated julep, six ounces, then add spirit of sal volatile, two drachms ; compound spirit of lavender, three drachms.

Two table-spoonfuls to be taken three or four times a day. For nervous irritability and periodical head-aches, this is a very valuable remedy.

Brushing the hair with the electric brush is a very great auxiliary to this medicine, in cases of nervous head-ach. It affords immediate relief by conducting from the body the superabundant electric or nervous fluid, which occasions the morbid irritation of the brain and nerves.

#### *Absorbent mixture.*

Take of magnesia, one drachm ; rhubarb powder, ten



grains; laudanum, six drops; pure water, two ounces; essence of mint, four drops. Mix.

A tea-spoonful to be given in cases of gripes and flatulency affecting children; if attended with purging, the following mixture will answer best.

Take of lime water, two ounces; compound tincture of cardamom seeds, two drachms; liquid laudanum, six drops—to be given as the preceding mixture.

*Stimulating mixture.*

Take of horse-radish root, sliced, and mustard seed, bruised, of each one ounce; infuse in a pint of boiling water in a gentle heat, for twelve hours; then strain and add compound spirit of lavender, one ounce.

A wine glassful to be taken three or four times a day for paralytic complaints.

This was a very favourite mixture for palsy, with the late Dr. Campbell of Hereford. A similar composition is often prescribed by Dr. Baillie and Dr. Latham, in paralytic affections.

*For Scrophula, or King's Evil.*

Take of essential salt of bark, two drachms; muriate of lime, three drachms, or prepared natron, two drachms; dissolve in a pint of distilled water; then add compound tincture of rhatany root, one ounce.

Three table-spoonfuls to be taken three times a day.

When scrophula is attended with weakness of the system, this is a very valuable medicine. For the purpose of correcting the scrophulous diathesis of the system, the following is often prescribed by Mr. Cline, and Mr. A. Cooper:

Take of prepared soda, five grains; sarsaparella powder, twenty grains. Mix.



To be taken three times a day in a little peppermint water or milk.

*For the Hooping Cough.*

Take of ipecacuan powder, ten grains; tincture of asa-fœtida, one drachm; laudanum, ten drops; pure water, two ounces. Mix.

To a child of two years old, a tea-spoonful may be given every three hours, increasing ten drops for every additional year.

This mixture is generally of great service in hooping cough, when the system has been reduced by the disease, or when the patient is of a weakly constitution. On the first attack of the complaint; an emetic dose of antimonial wine is proper. If the system be full, or if there be a great determination of blood to the head, during the fit of coughing, or bleeding at the nose, a purgative medicine, and sometimes the loss of blood will be necessary.

*Tonic mixture.*

Take of extract of rhatany root, three drachms; dissolve in twelve ounces of water, and add aromatic tincture of rhatany root, one ounce; spirit of sal volatile, two drachms.

Two or three table-spoonfuls to be taken every three or four hours, for relaxation and weakness of the system: when attended with a sluggish state of the bowels, three drachms of the vitriolated kali may be added, and, in case of profuse perspiration, two drachms of the diluted vitriolic acid may be substituted for the spirit of sal volatile.

This is a very valuable medicine for general debility of the system. As a remedy for fluor albus, the rhatany root is much recommended by Sir Henry Hallford, Dr. Maton,

Dr. Percival, and other eminent practitioners. For gleet this mixture is also a very valuable medicine.

*Saline mixture.*

Take of crystallized acid of lemon, one drachm, or fresh lemon juice, an ounce and a half; salt of wormwood, one drachm; white sugar, three drachms; pure water, twelve ounces; essence of peppermint, thirty drops. Mix.

A tea-cupful to be taken frequently in inflammatory fevers and sore throat.

P I L L S.

*Pills for Dropsy.*

Take of squill pill, two drachms; prepared calomel, ten grains; gamboge powder, a scruple. Mix well together, and divide into thirty-six pills.

Three to be taken twice a day, with a wine-glass full of the tonic mixture.

After taking these pills six days, the calomel should be omitted, and in the course of ten days, if the mouth be not affected by it, it may again be taken with advantage.

*Pills for the Gravel.*

Take of dried natron, two drachms; Spanish soap, two drachms; with oil of juniper, make into sixty pills.

Of which three are to be taken three times a day.—When the mephitic alkaline or soda water disagrees with the patient, this form affords an excellent substitute.

*Tonic Pills.*

Take of essential salt of bark, one drachm; salt of steel, a scruple; gum olibanum, one drachm, with simple syrup; make a mass, and divide into thirty-six pills.

Three to be taken twice a day, for fluor albus and gleet

*Bilious Pills.*

Take of rhubarb, two drachms; calomel, half a drachm; essence of peppermint, ten drops; with a little syrup, make into thirty pills.

Three to be taken every third morning, with a wine glassful of the solution of Epsom salt.

*Cathartic Pills.*

Take of compound colocynth pill, one drachm; calomel, fifteen grains; mix, and form into fifteen pills.

Three to be taken for a dose, in obstinate constipation of the bowels, and redundancy of bile.

These pills are sold under the name of Dr. Hugh Smith's Antibilious pills.

## G A R G L E S.

*Discutient Gargle.*

Take of purified nitre, one drachm; gum arabic, three drachms; dissolve in half a pint of pure water.

To be used frequently for inflammatory sore throat.

*Acidulated Gargle.*

Take of red rose leaves, two drachms; infuse in a pint of boiling water till cold; then strain, and add diluted vitriolic acid, thirty drops.

For inflammation of the tonsils and mouth.

*Astringent Gargle.*

Take of oak bark, half an ounce; boil in a pint of water for a quarter of an hour; then strain, and add alum, two drachms; red port wine, four ounces.

To be used every two or three hours, in cases of relaxation, or falling down of the soft palate.

*Detergent Gargle.*

Add to the acidulated gargle, tincture of myrrh, and honey, of each half an ounce.

For the malignant ulcerated sore throat, thrush, and foul ulcers in the mouth.

## LAVEMENTS OR CLYSTERS.

*Anodyne Lavement.*

Take of starch jelly, half a pint; laudanum, forty drops. Mix.

The whole to be injected by means of a pewter lavement syringe, in cases of dysentery, violent purging, and pain in the bowels.

*Laxative Lavement.*

Take of Epsom salt, two ounces. Dissolve in three quarters of a pint of warm thin gruel, or broth, with an ounce of fresh butter, or sweet oil.

*Anti-spasmodic Lavement.*

Take of tincture of asafoetida, half an ounce; laudanum, forty drops; gruel, half a pint. Mix.

For spasmodic affections of the bowels.

*Nutrient Lavement.*

Take of strong beef tea, twelve ounces; thicken with hartshorn shavings, or arrow root.

In cases of extreme debility of the body, or when the patient cannot take food by the mouth, in consequence of some obstruction in the throat, this affords considerable support to the system, and has been the means of preserving the lives of patients till the cause has been removed.



It should be thrown up with a flexible tube, longer than the clyster pipes in common use, gently insinuated up the rectum. In consequence of the improper exhibition of this composition, a diarrhœa has been produced, which the reduced state of the patient could ill bear.

## LOTIONS AND EMBROCATIONS.

### *Eye Water.*

Take of Goulard's extract of lead, ten drops; white wine vinegar, two drachms; laudanum, thirty drops; distilled water, eight ounces. Mix.

For inflammation of the eye, or eyelids.

To be frequently applied by means of folds of fine old linen, over the affected eye or eyes.

### *Astringent Eye Water.*

Take of blue vitriol, one grain; dissolve in four ounces of distilled water, and add laudanum, thirty drops.

To be dropped between the eyelids of the affected eye, three or four times a day, for films or specks.

### *Discutient Lotion.*

Take of camphor, two drachms; dissolve in rectified spirit of wine, four ounces; then add white wine vinegar, a pint.

For strains, bruises, and inflammation, arising from accidents.

It may be conveniently applied in the form of a poultice, by adding a sufficient quantity of bran to make it of a proper consistence, and pouring on the surface a fresh quantity of the embrocation, when the bran gets dry, or feels warm to the patient.



*Volatile Liniment.*

Take of spirit of hartshorn, six drachms; olive oil, an ounce; shake well together.

This is a good stimulating liniment for chronic rheumatism, paralytic numbness, and stiffness of joints.

*Liniments for Burns and Scalds.*

Take of linseed oil and lime-water, of each four ounces; laudanum, half an ounce. Mix.

To be applied by means of lint, or soft old linen: or,

Take of expressed juice of potatoes, half a pint; spirit of wine, three ounces; liquid laudanum, half an ounce. Mix.

To be applied as above.

The efficacy of the latter liniment, in recent scalds and burns, has lately been much extolled by several able surgeons in London.

## THE MEANS OF FUMIGATING INFECTED CHAMBERS, &c. AND PREVENTING THE PROGRESS OF CONTAGIOUS FEVERS.

FOR the important purpose of purifying the contaminated air of the wards and rooms of patients afflicted with contagious fevers, various means have been employed from the earliest period of medicine.\* The acetic acid (vinegar) and different mineral acids have of late years been much used for this purpose, and ample experience has proved them to be efficacious. Dr. James Johnstone, of Worcester, in a dissertation on the malignant epidemical fever, which prevailed in Kidderminster in 1756, as-

\* Hippocrates, upwards of two thousand years ago, directed herbs and nitre to be boiled in vinegar in the chambers of the sick.

serts that he found vinegar, sprinkled about the room when the weather was warm, and boiled with myrrh or camphor, effectually to correct putrid effluvia. "The steams arising from the latter," the doctor asserts, "preserve the air from putrefaction, will insinuate themselves by the absorbent vessels of the lungs into the blood-vessels, and greatly assist in impeding the progress of putrefaction in the fluids, &c. The camphorated acetic acid, No. 38, evaporated in a saucer over the blaze of a candle, is not only more commodious, but, from the volatile nature and pungency of the acid, it will have a more rapid action on contagious or putrid effluvia.

Citizen Guyton Morveau recommends the muriatic gas, which he found particularly efficacious in correcting the putrefaction of dead animal matter in the church of Dijon. For fumigating *uninhabited* rooms, the muriatic acid gas may answer much better than the steams of vinegar or nitrous gas; but as it considerably irritates the lungs, and is unfit for respiration, it is not proper for the apartments of the sick. Dr. Johnstone also recommends this gas in a slight degree; but, on account of its being unpleasant for respiration, he preferred the employment of vinegar.\*

For disengaging the muriatic acid gas, citizen Guyton Morveau gives the following directions: "Put into the middle of the place which is to be purified, a chafing-dish, on which a pan half filled with sand and ashes is to be laid, on which a glass or earthen bowl, containing common salt, is to be placed; the sand being heated, pour on the salt, at once, vitriolic acid, and retire immediately—the windows and doors should be exactly shut. The proportion for a high and spacious ward, containing twenty beds, is, of common salt, nine ounces six drachms, and of vitriolic acid, seven ounces seven drachms (by weight), which quantities are to be augmented or diminished according to the space of the room to be purified." Inhabited rooms this author recommends to be fumigated with the oxygen

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\* The evaporation of vinegar in the rooms of the sick was a common practice in this country long anterior to Dr. Johnstone's publication: but it appears that the doctor was the first who employed the muriatic acid gas, although citizen Guyton Morveau, in his publication, claims the priority of the discovery. Citizen Guyton, however, did not use it till the year 1773; whereas it is recommended by Dr. Johnstone in his Dissertation, published in 1758.

nated muriatic acid, which is made by adding black oxide of manganese in the following proportion :—Take of common salt, two parts; black oxide of manganese, one part; vitriolic acid, two parts; after rubbing the salt and manganese together in a glass mortar, place the mixture in an open glass vessel in the infected chamber, and pour on it the vitriolic acid. The fumes are immediately exhaled and diffused through the atmosphere of the room, and effectually destroy putrid particles or contagious matter.

The nitric acid gas is preferred by Dr. James Carmichael Smyth, who directs it to be used in the following manner :—“Take fine sand, and heat it in an iron ladle or shovel; when made very hot, fill with it an earthen quart pipkin, in which immerse a common teacup, containing about half an ounce of vitriolic acid, to which, when it has acquired a small degree of heat, gradually add the same quantity of purified nitre in powder; stir the mixture with a slip of glass until the vapour arise in considerable quantity. The pipkin is then to be carried about the room (the doors, windows, &c. being closely shut), occasionally putting it under the bed, and in every corner and place where any foul air may be supposed to lodge: the fumigation to be continued till the room be filled with the vapour, which will appear like a thick haze.”

In very malignant cases it should be repeated twice a day; but otherwise, once will be sufficient; which should be regularly continued for some days after the contagion is supposed to be destroyed. If the vapour irritate the lungs, so as to excite much cough, fresh air should be admitted, by opening the doors or windows of the room. After a few repetitions, this effect will not, however, be produced; but, on the contrary, it will be found agreeable and refreshing. It must be particularly remembered that no wood or metal should be employed in the process, otherwise *dangerous* and *offensive* vapours will be disengaged with the nitrous. Proper attention should likewise be paid to cleanliness in the apartments, clothes, and bedding.

The nitrous vapours, thus disengaged, not only destroy the subtile infectious particles arising from putrid bodies, or from persons labouring under contagious fevers, as effectually as the muriatic gas recommended by Citizen Guyton Morveau, but also communicate to the atmosphere an animating principle, which, by respiration, enters the



system in such quantity, as evidently to invigorate the vital powers and cheer the mind, and thus they prove more beneficial than medical men are generally aware of. The oxygenated muriatic acid of Citizen Guyton has a similar effect, and was preferred by Mr. Cruickshank, on the supposition of its being more efficacious, as well as more pleasant to respire.

In order more effectually to resist the effects, and check the progress of infection, the following rules should be particularly enforced.

1st, None should be permitted to visit patients labouring under infectious disorders, but those who are impelled by the calls of duty, affection, or necessary business.

2dly, None should be admitted *fasting* or *before* breakfast. The afternoon is the fittest part of the day for visits of this kind; or if they must be paid in the morning, a glass or two of Port or Madeira, or a dose of compound tincture of bark, or rhatany root, ought previously to be drank. A handkerchief sprinkled with camphorated acetic acid, held occasionally to the nose, is also an useful precaution to those who visit infected persons. Smoking may also be of some service.

3dly, The utmost attention to *cleanliness* in *every thing* relative to the patient, should be observed. This is particularly requisite in camps, hospitals, poor-houses, gaols, &c. The frequent change of linen, and the *immediate removal* of every thing of an *offensive nature* are absolutely necessary.

4thly, The free admission of *pure atmospheric air*\* is indispensably requisite. The absolute necessity for this caution is strikingly evinced by what is recorded to have happened at Philadelphia, in the yellow fever, of 1793. Of 2000 persons who were removed to tents erected in the fields, only 17 died in 25 days; whilst out of an equal number in the city, 178 perished.

5thly, Attention ought to be paid to the *temperature* of

† The atmosphere is not, as was formerly supposed, a simple elementary body, but consists of two very different kinds of air, the one eminently conducive to the purposes of life, named oxygen; the other, which is nearly three-fourths of the whole, destructive of life, and called azote. On a due admixture of these two component parts of the atmosphere, depends not only respiration, but the colour and circulation of the blood, and all the phenomena of life.

the air. *Extreme heat* might increase the tendency to putrefaction, which exists in a greater or lesser degree in most infectious disorders. *Extreme cold*, on the other hand, is not only very ungrateful to the feelings of the sick, but, by its debilitating property, may increase the virulence, and extend the ravages of contagion.

6thly, When a person dies of an infectious distemper, the body should be removed, *as soon as possible*, into a room *appropriated to that use*: it should be then wrapped in a pitched cloth, and the friends of the deceased should be desired to proceed to interment as early as is consistent with propriety. Early burial was so much enforced during the plague at Marseilles, that Dr. Arbuthnot, in his *Treatise on Air*, asserts that it was clearly ascertained many were buried alive; a body apparently dead should not, therefore, be too hastily consigned to the grave, the natural heat and pure air of the earth being very powerful agents in restoring the vital functions, in case of their suspension.

7thly, As infection is liable to be communicated by clothes which have been worn by the sick, such clothes ought not to be used, until they have been well washed, and thoroughly fumigated.

8thly, After the recovery or decease of a person labouring under an infectious fever, the roof or walls of the apartment in which he lay ought to be white-washed, the windows kept open during the day, and flowers or herbs, immersed in water, placed in such parts of the room as are more immediately exposed to the action of the sun's rays upon them.\*

\* Whilst Dr. Priestley was engaged in a series of experiments to enable him to purify contaminated air, he discovered that vegetables answered this purpose most effectually. The experiment by which he illustrates the fact is this:—Having rendered a quantity of air very noxious, by mice breathing and dying in it, he divided it into two receivers inverted in water, introducing a sprig of mint into one of them, and keeping the other receiver, with the contaminated air in it, alone. He found, about eight or nine days after, that the air of the receiver into which he had introduced the sprig of mint had become respirable; for a mouse lived very well in this, but died immediately upon being introduced into the other receiver, containing the contaminated air alone. All strongly-scented objects vitiate the air: and it has been satisfactorily proved by the experiments of Ingenhouz, Priestley, and others, that most plants emit during the night a large proportion of azotic or irrespirable gas:



9thly, The establishment of fever wards, or houses of recovery, for the reception of persons attacked with infectious fevers, is an institution which reflects immortal honour on its founders, and is better adapted to check the ravages and prevent the recurrence of these maladies in large towns, than perhaps any other plan which has hitherto been devised.

It is worthy remark, that many very respectable practitioners in the West Indies, as well as on the continent of America, deny that the fevers which at times have proved so destructive in those places, were contagious; and Dr. John Vaughan, after investigating the cause and nature of the fever which prevailed with such violence in the borough of Wilmington, in North America, in the year 1802, concludes, contrary to the general opinion, that the disease was not imported, that it was not contagious, but that it depended upon some noxious state of the atmosphere, owing to certain putrid effluvia, which formed a constituent part of heavy fogs, that used to collect in the evening, and be suspended over the flats during the nights. Hence we find that fevers which are attributed to contagion, will make an equally rapid progress where guards have been placed, as they have been in Russia, and where high walls have been built to prevent communication; and some instances have happened of a great part of Europe, and some of Asia, Africa, and America, suffering from similar complaints nearly at the same time, from a very widely spreading noxious effluvium in the air. Dr. Desgenette, physician to the French army in Egypt, and M. Assalini and Larray, having endeavoured to communicate the plague by infection without effect, were led to believe that the plague is not contagious; but such experiments are by no means satisfactory, for in all cases of infection, a certain state of constitution must exist to render the person susceptible of its action; hence those whose systems are perfectly healthy, or, as is technically termed, *not predisposed* to receive the contagion, may expose themselves to its influence with impunity.

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it is on this account that flowers suffered to remain all night in a bed-room, sometimes prove very deleterious in their effects. Nor is it less unhealthy to sleep in a room where a quantity of green fruit is constantly kept, as from its fragrance a portion of inflammable matter transpires, which soon impregnates the air.

The partial appearances of this fever, and its frequent occurrence at the same places, have induced some practitioners to suppose that it was produced by noxious vapours, or putrid miasmata disengaged from the earth. The French historian Mezeray, as quoted by the Hon. Mr. Boyle, states, "that a vapour broke out of the earth in the kingdom of Cathay, that caused fevers more fatal and universal than were ever before known, and that it consumed every thing before it, even the trees and stones." Hoffman, Sennertus, and many of the most respectable ancient physicians, have very justly observed, that the *fear*\* of contagion, under a *bad constitution of the air*, has been more productive of disease than the air itself, and it is to be feared, has been the cause of many unfortunate sufferers being lost for want of proper attention, and some even being buried alive.

Whatever the original source or nature of the contagion may be, after it enters the circulation, which is probably by respiration, like other specific poisons, it evidently generates a quantity in the system, which, by passing off by perspiration, contaminates the air; the means, therefore, recommended for purifying the air and ventilating the chamber, must considerably tend, not only to check its progress, but also to diminish its malignancy. (See Typhus Fever.)

## THE MEANS OF COUNTERACTING THE EFFECTS OF THE DIFFERENT POISONS ON THE HUMAN BODY.

Of poisons there are three classes, viz. *mineral*, *vegetable*, and *animal*.

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\* A remarkable instance of the influence of the depressing passions, in this respect, has been lately noticed by Captain Philip Beaver, in a work entitled "African Memoranda." This intelligent author, speaking of the disease which prevailed among his men at Bulama, observes, "It is melancholy, no doubt, but many have absolutely died through fear. More courage, and greater exertions, I firmly believe, would have saved many of them; but a lowness of spirits, a general despondency, seems to possess every body. When taken ill, they lie down, and say they know they shall die; and, what is very remarkable, I have never yet known one recover after having, in such manner, given himself up."

## OF THE MINERAL POISONS.

Arsenic is the most powerful, and therefore, for the purpose of destroying life, is generally employed. The solutions of mercury, copper, lead, and antimony, in different acids, are likewise, in no great quantity, active poisons. To counteract the effects of any of the mineral poisons taken into the stomach, the liver of sulphur is the most efficacious medicine, which may be administered in the following manner: Dissolve a large tablespoonful of the liver of sulphur in a pint of warm water, and give the patient two tablespoonfuls of the solution as soon as possible, and repeat it every ten or fifteen minutes for three or four doses, or as occasion may require. If this preparation cannot be readily procured, a teaspoonful of sulphur, with eight or ten grains of salt of wormwood, will afford the substitute.

Either the liver of sulphur, or salt of wormwood, by uniting with the acid of corrosive sublimate of mercury and the metallic salts decomposes them, and precipitates the metal in the form of a calx, nearly or wholly inactive. It will likewise be proper to dilute plentifully with warm water, and to excite vomiting, by giving, with the first dose of either of the above medicines, or as soon after as possible, two scruples of ipecacuan powder, and to hasten its operation by irritating the fauces with the finger or a feather. Oil and milk may likewise be given with a view to blunt its acrimony. If neither liver of sulphur nor salt of wormwood can be readily procured, ten grains of pearl or pot-ash may be employed, or half a table spoonful of soap lees given in a little water, or a strong solution of soap in water.

In all cases of mineral poisons \* this method should be adopted. If the poison should be arsenic, the alkaline medicines, as the liver of sulphur, salt of wormwood, or pearl-ash, will promote its solution, and hence it will be the better discharged by emetics.

As in cases of mineral poisons, what is to be done must

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\* When the patient refuses to give any account of the poison he has taken, it will be advisable to treat it as belonging to the mineral class, in order to avoid a loss of time, which, with the emetic dose of ipecacuan, will also succeed in expelling it, should it be of the vegetable kind.



be done speedily; it must be remembered, the most powerful medicine for counteracting their effects, is the *liver of sulphur*, given in a dose of twenty grains, dissolved in a glass of water, and repeated in a quarter of an hour, or in the manner above mentioned; and that when this preparation cannot be obtained, the salt of wormwood, or soap lees, with or without flowers of sulphur, are the best substitutes for it. (See Flowers of Sulphur.)

It is strange such powerful medicines in counteracting the effects of mineral poisons, should not have been noticed by Tissot, Buchan, and others who have written on the subject, professedly for public instruction. Dr. Buchan merely recommends oily drinks to be taken, and observes, if they fail to produce vomiting, "half a drachm of powder of ipecacuan must be given, or a few spoonfuls of the oxymel or vinegar of squills may be mixed with the water he drinks." The two latter articles no medical man, at least of any chemical knowledge, would think of employing, being more likely to increase than diminish the virulence of the poison.

With respect to mineral poisons, there is a rational ground for hope, as by proper management they may be decomposed, their effects counteracted, and the danger resulting from their exhibition guarded against and prevented; but the

#### VEGETABLE POISONS

Do not admit of such a remedy, there being no means of rendering them inert by decomposition. Their speedy evacuation should, therefore, be attempted by the most powerful emetics; as ten or fifteen grains of white vitriol, or four grains of emetic tartar, No. 35, with thirty of ipecacuan powder, No. 23, in a little water.

The sooner the emetic is administered, the greater is the probability of success, for such is the narcotic property of vegetable poisons, that in a short time they will so far destroy the sensibility of the stomach, as to render vomiting impracticable; their evacuation cannot then be effected, and their continuance is inevitably fatal. If an emetic medicine cannot be readily procured, attempts should be made to excite vomiting, by forcing a quantity of warm water into the stomach, and afterwards by irritating the fauces with a finger or a feather till the contents of the stomach are thrown up, which will often prove effectual.



The vegetable acids, being considered by many practitioners to possess anti-narcotic powers, may likewise be administered; vinegar being the most handy, and no doubt as efficacious as any, may be administered in the quantity of three or four tablespoonfuls. The patient should likewise be made to drink plentifully of warm water, or a strong infusion of coffee, the latter of which some experienced practitioners assert to be the most efficacious remedy that can be employed for the restoration of the sensibility of the stomach, and the removal of the spasms induced by vegetable poisons.

If the poison be an over dose of opium, the patient should be prevented from going to sleep, by shaking him or keeping him in motion, and applying some puugent smelling salts to the nostrils, while the above means are employed for its evacuation from the stomach. The propriety of bleeding, recommended by Dr. Buchan in such cases, is much to be doubted: no advantage can be derived from such a practice, but, as tending to diminish the powers of life, it would probably accelerate its fatal effects.

#### OF ANIMAL POISONS.

The effects of poison introduced by the sting of insects may be prevented, by applying, immediately, a little vinegar and spirit of wine, by means of some folds of old linen.

From the bite of a mad animal arises the most dreadful disease known in this country, termed *Hydrophobia*\*; for the prevention and cure of which a great variety of nostrums have been held forth to the public; but there is no satisfactory instance of any of them having proved useful; and no means yet suggested can be depended on, but the complete removal of the injured part by the knife or actual

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\* Dr. Berguillon, a French physician of repute, has lately published a treatise, in which he maintains, with great ingenuity, that this disease is produced *solely* by the power of imagination, without the intervention of any distinct material poison. This opinion has been since broached by several practitioners in England; but if the disease be communicated from one dog to another, or from a dog to a pig, a horse, or any other animal, of which there cannot be a doubt, surely it cannot be said to be imaginary.—“*Est natura hominum novitatis avida.*”

cautery. In this all medical writers on the subject agree, with this difference, that some contend it can only be effectual when it is done in a few hours; while others are of opinion, that the poisonous matter is *not immediately* absorbed into the system, and think the measures for destroying the part may be practised with success many days after the bite.

Sea bathing has been employed from time immemorial as a preventive; and lately mercury by many eminent practitioners: but there are no well-attested cases in which they have been attended with advantage, so that little or no dependance can be placed on them. The complete cutting out of the part to which the teeth have been applied is unquestionably the most to be relied on: and as hydrophobia, when once it has taken place, is so generally fatal, and the period for absorption uncertain, the sooner the excision of the part is accomplished, the greater will be the chance of success. Till the operation can be done, the part should be constantly washed; and even after its removal, a discharge should be kept up from the surface of the wound by stimulating applications of basilicon ointment, with red precipitate of mercury, or spirit of turpentine.

The preventive medicine, so much extolled by Dr. Mead, is composed of ash-coloured liverwort, powdered, half an ounce; black pepper, powdered, quarter of an ounce: to be mixed well together, and divided into four doses, one to be taken every morning fasting, for four mornings successively, in half an English pint of cow's milk warm.

“After these four doses are taken (the doctor observes), the patient must go into the cold bath, or a cold spring or river, every morning fasting, for a month; he must be dipped all over, but not stay in (with his head above water) longer than half a minute, if the water be very cold; after this he must go in for three times a week, for a fortnight longer. The person must be bled before he uses the medicine.”

In the space of thirty years, the doctor asserts, that he had an opportunity of giving this plan a trial no less than *one thousand times*, with (as he observes) *uniform success!!* No experienced practitioner, however, I am persuaded, will attribute to it any antidotal power whatever, or think of employing it to the exclusion of more plausible reme-

dies. If mercury be applied, it must be used both internally and externally, so as to excite salivation as soon as possible. Two drachms of the strongest mercurial ointment at least should be rubbed into the inside of the thighs and the part surrounding the wound; two or three times a day, and a pill, composed of three grains of calomel, with a grain of opium, taken twice a day. If symptoms of hydrophobia\* should occur, a vein should be opened in the arm, and the blood suffered to flow till the patient faints. This practice has, in some instances, succeeded, and is by far the most rational. If the patient has the power of swallowing, two grains of the sugar of lead, in a little water, may be given every two hours, or made into a pill with conserve of roses. (See Hydrophobia.)

## OF SUSPENDED ANIMATION, AND THE MEANS OF RECOVERY.

The suspension of the vital powers, produced by immersion in water, called drowning, and that by strangulation and suffocation by noxious vapours † and lightning, are

\* It is thus named, because the person dreads the sight or noise of falling of water.

† The unhappy incidents that occur on the opening of subterraneous places—such as tombs, cellars, vaults, &c.—are produced by the quantity of fixed air contained in them, which, being unfit for respiration, occasions immediate suffocation. The air is considerably heavier than common air, hence it occupies the lowest situations, such as wells, caverns, &c. From the famous lake of Averno, where Virgil placed the entrance of hell, this air is exhaled in so large a quantity, that birds cannot fly over it with impunity. Before a person enters a vault or cell that has been for some time shut up, or descends a well, the experiment should be made whether a candle will burn in the atmosphere of the place; for ignition and respiration are so very similar, that the same air that will support the one will also the other. The best method of rendering the air of such places fit for respiration, is to explode in it some gunpowder, in proportion to the size of the place; for this purpose, the fireworks named bomb and cracker will answer best, as they may be thrown to the bottom of the well, or end of the vault, &c. To purify the air of the vaults at Dijon, M. Morveau threw in bottles of muriatic acid, with such force that the bottles might be broke, and the acid spilt in the place: but this experiment was made to correct putrid effluvia, and not fixed air. If nitric acid



very similar, and require the same resuscitative means. As in poisons, so in cases of suspended animation, what is necessary to be done should be done *quickly*; therefore, on the *first alarm* of any person being drowned or suffocated, while the body is searching for, or conveying to the nearest house, the following articles should be got ready—viz. *warm blankets, flannels, a large furnace of warm water, heated bricks, a pair of bellows, warming-pan, sal volatile, clyster pipes, and an electrifying machine.* In conveying the body to the house, the head and chest should be placed rather in a reclining position, that in case any water should have got into the lungs it may run out at the mouth, which the slight agitation occasioned by carrying the body will accelerate. The head, however, should not be kept much lower than the shoulders, or even in a reclining position, many minutes, otherwise the blood will gravitate in such quantity into the vessels of the head, as very considerably to impede the restoration of life, by compressing the brain.

The body being placed on warm blankets, in a *spacious* room with a good fire, and only five or six attendants, the *first attempt* \* should be to restore its *heat* and the *circulation* of the blood, by friction with warm flannels, and by placing bladders filled with warm water, to the pit of the stomach, and soles of the feet. Ether and other spirits, recommended by the Humane Society, for external applications, are *very hurtful*; the degree of cold produced by their evaporation † counteracting the effects of friction.

The restoration of the important functions of the lungs ‡,

were employed in the same manner, it would not only destroy putrid effluvia, but render fixed air fit for respiration, by disengaging a quantity of vital air.

\* If the suspension be occasioned by noxious vapours taken into the lungs, the first object must be their expulsion, by compressing the ribs and bowels so as to force up the diaphragm. The air will be thus in a great measure expelled, and on removing the pressure, the atmospheric air will rush into the lungs, when the heart generally begins to flutter, and life gradually to return.

† It is a well-known fact, that an animal may be frozen to death by sprinkling ether over the surface of the body; its rapid evaporation carrying off the vital heat.

‡ Dr. Cullen, in a letter to Lord Cathcart on the subject of suspended animation, says, that very often the water does not enter



should be attempted by forcing air from a bellows through one nostril\*; the other and the mouth being kept *closely* shut, an assistant should gently press down the ribs, as soon as their elevation indicates a distension of the lungs, and this alternate inflation and compression should be continued some time, so as to imitate natural respiration: the friction of the body, &c. being still continued by the other assistants.

The action of the heart should be excited by passing through its region gentle electric shocks, from the left to the right side, and from the front to the back alternately.

The bowels should be fomented and stimulated, by throwing up a quantity of warm water, with a handful of common salt dissolved in it, which may be done with a clyster-pipe and bladder. The injection of tobacco fumes up the fundament, recommended by the Humane Society, from the *narcotic* quality of the herb, is more likely to prove hurtful than otherwise. It is strange, a herb, noted for its extraordinary effects in *diminishing* the vital functions, should be proposed as a *stimulant* in cases of their suspension†.

A slight agitation of the body every six or ten minutes, will act as a great auxiliary to those means.

Bleeding having a tendency to weaken the force of the

the lungs in any material quantity, and that death ensues in consequence of the stoppage of respiration, and the consequent ceasing of the action of the heart, whereby the body loses its heat and vital principle. Mr. Hunter, in the Philosophical Transactions, Vol. XLVI. advances the same theory, and asserts, that the restoration of breathing is all that is necessary to restore the heart's motion.

\* During this process, it will be proper to draw the tongue forward, in order to elevate the epiglottis, which by opening the larynx, will facilitate the admission of air into the lungs. If this be neglected, the air will be more likely to pass down the gullet into the stomach, the distension of which, by forcing up the diaphragm, will, in some degree, elevate the chest, and thus deceive the attendant by giving the appearance of the air having entered the lungs. Great care, however, should be taken, that the air does not escape through the mouth instead of passing into the lungs, on account of the drawing forward of the tongue.

† The fumes of tobacco thus administered in cases of spasmodic affections of the bowels and strangulated rupture, I have known, in many instances, to destroy life in a few hours.

circulation more than promote it, should be employed only when deemed necessary by a medical practitioner. When, however, there is an evident congestion of blood in the vessels of the head, which is generally produced by strangulation, the opening of the temporal artery will prove very beneficial, and should not be delayed.

The brain and nervous system may be stimulated by applying electric sparks to the head and surface of the body\*.

On the appearance of any symptom of returning life, a teaspoonful of sal volatile, or a tablespoonful of warm brandy, should be got into the stomach, either at once, or by small quantities frequently repeated.

If, after a *vigorous* employment of these means, for the course of *two hours*, there should be *no* symptom of returning life, and any brewhouse or warm-bath can be obtained, the body should be carefully conveyed to such a place, and remain in the bath, or surrounded with warm grains or ashes†, for three or four hours; but if not, the plan proposed should be *persisted* in for an hour or two longer, there being instances of lives having been restored after *three hours'* unremitting perseverance.

If the subject be very young, it may be placed between two healthy persons in a bed; the natural vital warmth has in this manner proved, in many cases, successful.

The apparatus for inflating the lungs, and the drag, recommended by the Humane Society, should be more generally kept at public or farm-houses, near to rivers and canals, many lives being lost for the want of the latter particularly.

\* I was, some time since, successful in restoring a poor woman, who had unfortunately slipped off a plank into the Thames, and from the information I could obtain, she was under water for nearly half an hour. Being, fortunately, on the spot, the methods above suggested were immediately employed. The case (Mrs. Bloxam, of Bankside) was published by Dr. Hawes, in the reports of the Humane Society, and the anniversary meeting adjudged me the honorary medalion.

† Tissot mentions an instance of a young girl who was restored to life after she was taken out of the water to all appearance dead, by laying her naked body in hot ashes: after remaining in that situation for half an hour, the pulse returned, and she soon afterwards recovered speech. This author also relates the case of a man who was restored to life after he had remained *six hours* under water, by the heat of a dunghill!!

The means recommended for the recovery of drowned people are equally applicable to a number of cases where the vital functions appear to be *only suspended*, such as convulsive and fainting fits, suffocation from noxious vapours, and spasmodic affections of the lungs, strangling, intense cold, blows or falls, &c. &c. Through their being neglected, from the supposition that the person is really dead, there is little doubt but that the principles of life have been revived by the heat and pure air of the earth after interment.

## TREATMENT OF A FIT OF INTOXICATION.

Different acids have been recommended for the purpose of correcting the intoxicating power of spirituous and vinous liquors, but the salutary effects that follow their use is probably produced by the diluting liquor administered with them. The recovery of a person in a fit of intoxication must chiefly depend on evacuating the stomach, which is best done by forcing down a quantity of lukewarm water, and provoking vomiting by irritating the fauces with the finger or a feather. If the person have so far lost the powers of sense and motion as to be unable to help himself, he ought to be placed in an arm-chair that will secure him from falling, and the neckcloth and collar of the shirt immediately loosened. The doors and windows of the room should be thrown open to admit of a free ventilation, and all visitors, except assistants, excluded; and whatever may add to the heat of the body should be carefully avoided.

An horizontal position, as lying on the floor or bed, favouring the influx of blood into the vessels of the brain, should be avoided if possible. In case the person cannot be kept in a chair, the head and chest should be elevated by pillows, and the body inclined a little to one side for the purpose of rendering vomiting more easy. If the face be *much* swelled, and *unusually* flushed or bloated, the breathing *laborious*, the eyes *fixed* and their blood-vessels *distended*, the danger of apoplexy may be apprehended; to avert which it will be necessary to extract blood from the *temporal artery*, to put the feet in *warm water*, and administer an *acid* clyster of common salt and gruel, and to use every



means to *provoke vomiting* \*. Throughout the whole paroxysm the application of vinegar, spirit of wine, or ether, to the temples and front and back part of the head, is very serviceable; the cold produced by the evaporation checks the determination of blood to the head, and moderates the heat and velocity of the circulation in the brain. The common application of pungent smelling-salts, or spirit of hartshorn, to the nostrils, by stimulating the brain, is in this case improper.

People often lose their lives in a fit of intoxication by falling down in an unfavourable posture, in consequence of an inability to conduct themselves: the head being bent under the body, the return of blood is in a great measure prevented, and respiration obstructed or totally stopped, and by continuing in this situation the living principle is soon extinguished. It is to be suspected that most of the travellers who perish among snow are of this description; fool-hardy, under the false courage of dram-drinking, they sally out in the dark to explore their way, and quickly lose the road from the change of objects which falling snow occasions. The effects of the dram, in this situation of distress, accelerate death, by assisting to bring on drowsiness or sleep, which exposes the body to the action of cold, and the unfortunate traveller soon sleeps “ne’er to wake again.”

The resuscitative means already recommended for the recovery of drowned people, should have a fair trial before a body so found be pronounced dead, as it is impossible to say, under such circumstances, what time has elapsed since he *last breathed*; for although the limbs may be cold and stiff, the heart may still remain so warm and excitable, that on restoring heat to the body by friction, and inflating

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\* Vomiting, under an impending apoplexy, has been considered a dangerous practice by some *inexperienced* physicians: I have long made the observation, that *spontaneous* vomiting is a *certain* relief when there is every sign of instant apoplexy; it is therefore fair to imitate nature, which ample experience fully justifies. Indeed, those practitioners who have cavilled most at this practice, have produced no fact to controvert it, their dislike resting *solely* on *theoretic* opinions. To these opinions, fortunately, the operations of nature do not bend, for if we are to suppose it dangerous to evacuate the loaded stomach of the inebriate, vomiting, at any time, must be considered an operation not only inexpedient, but to a certainty hurtful.



the lungs, the vital functions may again be put into motion. The body should not, however, be *suddenly* exposed to the heat of the fire, or put into warm water, till there are no hopes of recovery by the other means.

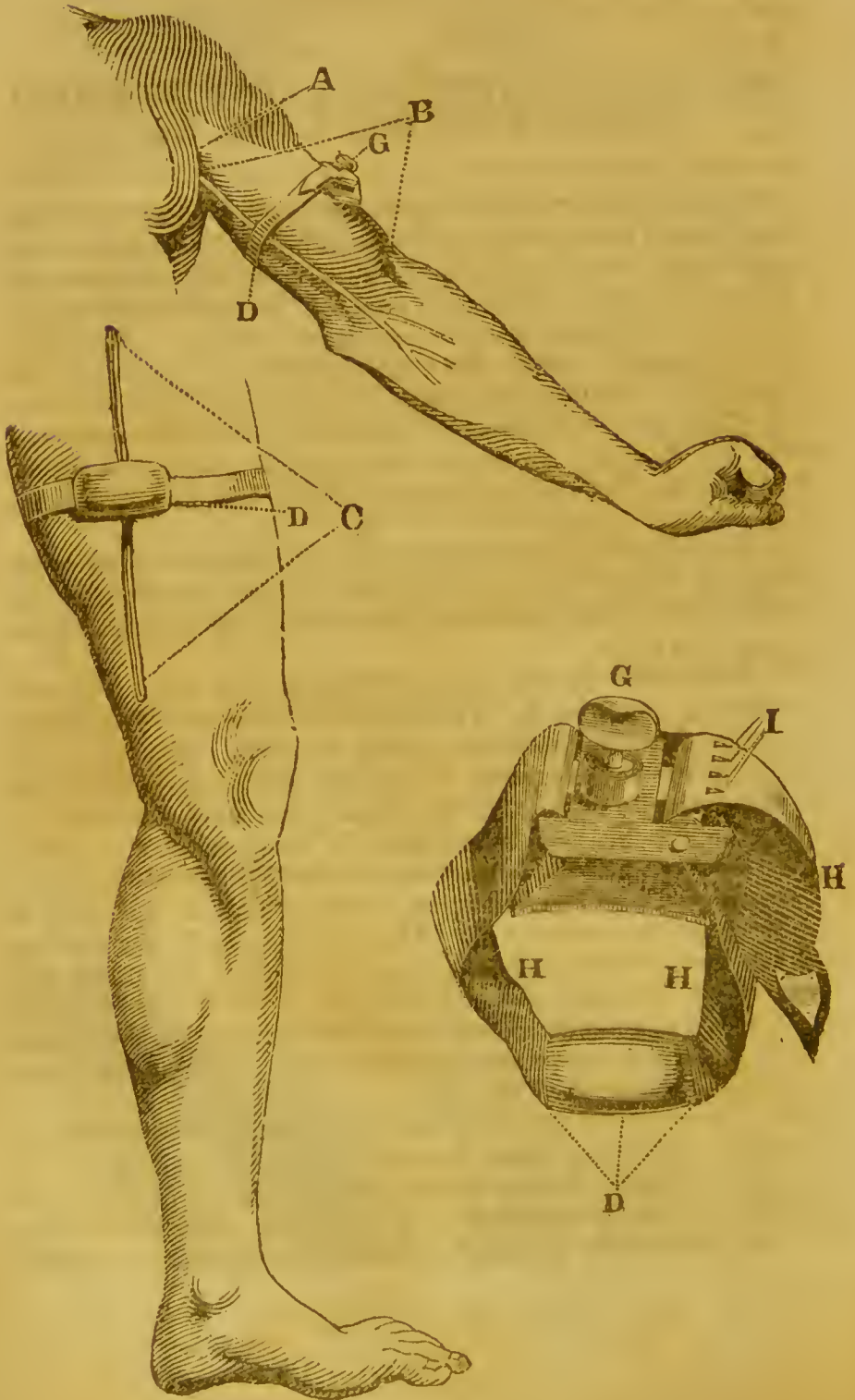
## THE MEANS OF STOPPING A FLOW OF BLOOD FROM WOUNDED LIMBS, &c.

In all cases of divided arteries of the extremities, the first object is to prevent the loss of blood, by compressing the trunk of the vessels *above* the wound, till surgical aid can be obtained. For this purpose, an instrument is generally employed termed *tourniquet*; which, when skillfully applied, never fails immediately to suppress the bleeding. Many instruments of this kind have been recommended by surgeons of reputation, but that invented by Mr. Savigny, an ingenious surgeons' instrument maker in London, is not only more simple, but more effectual in its application.

In order to render the use of this instrument more familiar, I have given an engraving which represents it *on* and *off* the limb, and also the course of the arteries of the arm and thigh.

The artery of the upper extremity, or arm, proceeds from the trunk at A, in the following manner: the trunk passes into the arm-pit, *deeply situated*, then proceeds along the inward part of the arm *obliquely* towards the fore-part of the joint of the elbow, and here divides into three branches; in this course to its division it lies *near to the bone*, and therefore admits of being more successfully compressed. The situation of this trunk is described in the plate by the lines B. The compression for preventing the flow of blood from divided arteries of the upper extremity, whether above the elbow, or of the hand, must therefore be made in some part of the course of the trunk of the artery expressed by the lines B, between the arm-pit and the bend of the arm.

The distribution of the vessels of the *lower* extremity is thus: the artery passes from the cavity of the belly to the groin, where, in *thin* people, the pulsation of it may be felt. Here, in cases of a wound and effusion of blood *very high up* in the thigh, effectual compression may be

THE TOURNIQUET APPLIED TO THE UPPER ARM  
AND THIGH.

made by the fingers, or a strong pad, or firm body, pressed *very strongly*.

From the groin, the artery proceeds in an *oblique* direction downwards and inwards, as expressed by the line C; and about the middle of the inside of the thigh, expressed by the compress D, it lies close to the bone, which of course is the most favourable part for making a pressure on it, because of the resistance of the thigh bone; and when the wound is in any part *below* it, this is the place which surgeons fix on for the application of the *pad* of the *tourniquet*. The course of the vessel is then *downwards* and *backwards* to the ham; in the *hollow* of which, against the lower flat part of the thigh bone, the compression may be very successfully made in all cases of wounds or operations below the knee joint; but, *beyond* this part, compression must not be depended on, for immediately below the joint the artery divides, like that of the upper extremity, into three vessels, which are situated *between* the bones of the leg.

In using the tourniquet, great care must be taken that the pad, D, be applied over the artery, and the instrument itself as nearly opposite to it as possible. The bandage, H, is then to be conducted round the limb, passed through the opening of the instrument *behind* the roller, drawn over it very tight, and secured by fixing it on the three steel points, I: in most instances this will be found sufficient; but if it should not, a few turns of the screw, G, will effectually complete the intention.

The pad, or compress, is not, in all cases, necessary; and, even when the discharge of blood is considerable, if there be any doubt about the exact place to which it should be applied, it may be omitted entirely. The circular bandage, when made tight, will effectually compress both the trunk and the collateral branches of the artery; and, therefore, many surgeons consider the pad useless. When it happens not to be applied over the artery, but on one side of it, the pad may prevent the compression of the artery by the circular bandage, in consequence of which, the blood will continue to flow. Such a circumstance I have known to happen during the amputation of a limb at one of the London hospitals.

If the wound be in the head, or trunk of the body, the most effectual and easiest method of applying pressure, is by means of dossels of lint, or soft linen, held *firmly* upon



the divided ends of the vessels, or over the wound, by the fingers.

The tourniquet is only employed in case of the division of any of the vessels which convey the blood *from* the heart, termed *arteries*. In consequence of the power with which the blood is propelled through this system of vessels, it happens, that when they are wounded, the blood flows *rapidly* and *in jerks* from the wounded part.

The vessels by which the blood is returned to the heart, are called *veins*. The blood in them receives but little of the impelling force of the heart, and therefore moves not with a strong tide or current, but glides *evenly* and *gently* on: hence wounds of these vessels are of very little importance, a small degree of pressure by a finger, or a dossel of lint, or some folded linen, upon the wounded part, will effectually stop the bleeding. The same will be sufficient in cases of divided arteries, when the vessels are small, or when a tourniquet or bandage is not at hand.

Agaric, and other fungous substances, and preparations of iron and the mineral acids, have been much extolled for stopping the bleeding of wounds; their astringent effects, if any they produce, are very temporary, and are *always* productive of mischief, by irritating the wound, and preventing the union of its edges, or what is termed, its healing on the first intention.

The same may be said of Friar's, or Turlington's balsam, tincture of myrrh, &c.

THE END.